SID CODEBOOK

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FILE COMPOSITION BY STATE

This section of the codebook describes sources of the SID, inclusion of hospital stays in special units, exclusion of ambulatory surgery records, and inclusion of non-community hospitals.

ARIZONA

The HCUP Arizona files were constructed from the Arizona Hospital Inpatient Database from the Cost Reporting and Review Section of the Arizona Department of Health Services. Arizona supplied discharge abstract data for inpatient stays in acute care and rehabilitation hospitals with more than 50 beds. Some community hospitals, as defined by the AHA Annual Survey of Hospitals, may not be included in the HCUP SID because their data were not provided by the data source. In 1997, data from 3% of the community hospitals in Arizona were not received.

Arizona data are included in HCUP beginning in 1989.

Inclusion of Stays in Special Units. The source documentation supplied by Arizona does not indicate whether stays in special units within the hospital (e.g., psychiatric, rehabilitation, long-term care) are included.

Inclusion of Non-community Hospitals. Source documentation provided by Arizona did not indicate that stays from specialty hospitals were included in the Arizona data.

CALIFORNIA

The HCUP California files were constructed from the confidential files received from the Office of Statewide Health Planning and Development (OSHPD). California supplied discharge abstract data for inpatient stays in general acute care hospitals, acute psychiatric hospitals, chemical dependency recovery hospitals, psychiatric health facilities, and state-operated hospitals. Some community hospitals, as defined by the AHA Annual Survey of Hospitals, may not be included in the HCUP SID because their data were not provided by the data source. In 1997, data from 1% of the community hospitals in California were not received. California excluded inpatient stays that, after processing by OSHPD, did not contain a complete and "in-range" admission date or discharge date. California also excluded inpatient stays that had an unknown or missing date of birth.

California data are included in HCUP beginning in 1988.

Inclusion of Stays in Special Units. Included with the general acute care stays in community hospitals are stays in skilled nursing, intermediate care, rehabilitation, alcohol/chemical dependency treatment, and psychiatric units. Stays in these different types of units can be identified by the first digit of the source hospital identifier (DSHOSPID):

0	=	Type of unit unknown (beginning in 1996)
1	=	General acute care
2	=	Not a valid code
3	=	Skilled nursing and intermediate care (long term care)
4	=	Psychiatric care

5 = Alcohol/chemical dependency recovery treatment
6 = Acute physical medicine rehabilitation care.

The reliability of this indicator for the type of care depends on how it was assigned.

Beginning in 1995. Hospitals were required to assign type of care codes to individual records for certain discharges. These discharges included:

- general acute care (value = 1),
- skilled nursing and intermediate care (value = 3), and
- rehabilitation care (value = 6).

For discharges from facilities licensed as psychiatric care (value = 4) or alcohol/chemical dependency recovery treatment (value = 5), California continued to assign the type of care code to all discharges from the facility.

Inclusion of Non-community Hospitals. Source documentation provided by California indicated that stays in hospitals such as acute psychiatric, chemical dependency recovery, psychiatric health and state operated facilities were included in the California data.

A Very Unusual Community Hospital . One hospital, the Veterans Home of California, also known as the Nelson M. Holderman Memorial Hospital in Yountville (DSHOSPID n06281297, where n indicates the facility type, and HOSPID 06457), is very unusual. The majority of the beds are in a nursing home type unit. The AHA Annual Survey defines it as a community hospital; it is included in the HCUP California SID.

COLORADO

The HCUP Colorado files were constructed from the Discharge Data Program (DDP) files. The Colorado Health and Hospital Association supplied discharge abstract data from Colorado acute care hospitals, including swing beds and distinct part units. Some community hospitals, as defined by the AHA Annual Survey of Hospitals, may not be included in the HCUP SID because their data were not provided by the data source. In 1997, data from 1.5% of the community hospitals in Colorado were not received.

Colorado data are included in HCUP beginning in 1988.

Inclusion of Stays in Special Units. The Colorado Health and Hospital Association does not require hospitals to submit information from their SNFs and ICFs, but no attempt has been made to verify their exclusion.

Inclusion of Non-community Hospitals. Source documentation provided by Colorado did not indicate that stays from specialty hospitals were included in the Colorado data.

FLORIDA

The HCUP Florida files were constructed from the Florida Hospital Discharge Data Confidential Information received from the Florida Agency for Health Care Administration. The Florida confidential files consist of discharge abstract data from non-federal Florida hospitals. Some community hospitals, as defined by the AHA Annual Survey of Hospitals, may not be included in

the HCUP SID because their data were not provided by the data source. In 1997, data from 6% of the community hospitals in Florida were not received.

Florida data are included in HCUP beginning in 1988.

Inclusion of Stays in Special Units. Inpatient stays in special units (e.g., psychiatric, rehabilitation, long-term care) may be included in the HCUP Florida inpatient data. Florida instructs hospitals to submit records only for stays in acute facilities and to exclude records from special units, but according to Florida AHCA, not all hospitals follow these instructions.

Inclusion of Non-community Hospitals. Although Florida did not routinely collect data from long-stay or rehabilitation hospitals, some were present in their data. Until an administrative change in 1993, Florida continued to collect data from any facility that had previously reported to them regardless of changes in status.

In 1997, Florida reported data for psychiatric hospitals that were not previously included in the Florida State Inpatient Database. Florida also reported some acute care and nursing home units separately from their major facility. See the Florida note under DSHOSPID for specific details.

IOWA

The HCUP Iowa files were constructed from the Association of Iowa Hospitals and Health Systems Statewide Database. Iowa supplied discharge abstract data and some uniform bills for acute inpatient discharges from member hospitals. Some community hospitals, as defined by the AHA Annual Survey of Hospitals, may not be included in the HCUP SID because their data were not provided by the data source. In 1997, data from all of the community hospitals in Iowa were received.

Iowa data are included in HCUP beginning in 1988.

Inclusion of Stays in Special Units. The documentation supplied by the data source indicates that the data include stays in acute exempt units, but exclude stays in swing bed and long-term care units.

Inclusion of Non-community Hospitals. Source documentation provided by Iowa did not indicate that stays from specialty hospitals were included in the Iowa data.

MARYLAND

The HCUP Maryland files were constructed from the confidential files received from the State of Maryland's Health Services Cost Review Commission (HSCRC). Demographic and utilization data for inpatient stays in Maryland acute care hospitals were supplied by HSCRC in the Uniform Hospital Discharge Abstract Data Set. Some community hospitals, as defined by the AHA Annual Survey of Hospitals, may not be included in the HCUP SID because their data were not provided by the data source. In 1997, data from all of the community hospitals in Maryland were received.

Maryland data are included in the HCUP SID beginning in 1990 and in the HCUP NIS beginning in 1993.

Inclusion of Stays in Special Units. The documentation provided by the data source does not indicate whether stays in special units within a hospital (e.g., psychiatric, rehabilitation, long-term care) are included in the data.

Inclusion of Non-community Hospitals. Source documentation provided by Maryland did not indicate that stays from specialty hospitals were included in the Maryland data.

MASSACHUSETTS

The HCUP Massachusetts files were constructed from the Massachusetts confidential Case Mix Database files received from the Massachusetts Division of Health Care Finance and Policy. Massachusetts supplied discharge abstract data for inpatient stays from general acute care hospitals in Massachusetts. Some community hospitals, as defined by the AHA Annual Survey of Hospitals, may not be included in the HCUP SID because their data were not provided by the data source. In 1997, data from 13% of the community hospitals in Massachusetts were not received.

Massachusetts data are included in HCUP beginning in 1988.

Inclusion of Stays in Special Units. The documentation provided by the data source indicates that inclusion of discharges from special units within the hospital (e.g., psychiatric, rehabilitation, long-term care) varies by hospital.

Inclusion of Non-community Hospitals. Source documentation provided by Massachusetts did not indicate that stays from specialty hospitals were included in the Massachusetts data.

NEW JERSEY

The HCUP New Jersey files were received from the New Jersey Department of Health and Senior Services. The New Jersey files consist of discharge abstract data for all inpatient and same-day stays. New Jersey supplied discharge abstract data for inpatient stays from general acute care hospitals. Some community hospitals, as defined by the AHA Annual Survey of Hospitals, may not be included in the HCUP SID because their data were not provided by the data source. In 1997, data from 8% of the community hospitals in New Jersey were not received.

New Jersey data are included in HCUP beginning in 1988.

Inclusion of Stays in Special Units. The documentation provided by the data source does not indicate whether stays in special units within the hospital (e.g., psychiatric, rehabilitation, long-term care) are included.

Exclusion of Ambulatory Surgery Records. New Jersey supplied a mixture of inpatient and ambulatory surgery records, which were not distinguished by a record type indicator. Ambulatory surgery records were excluded from the HCUP inpatient database based on a definition supplied by New Jersey. The definition of ambulatory surgery records supplied by New Jersey is:

- Same-day stay (LOS = 0),
- Non-zero charges to operating room or same-day surgery, and

- Discharged to home (DISP = 1).

Inclusion of Non-community Hospitals. Source documentation provided by New Jersey did not indicate that stays from specialty hospitals were included in the New Jersey data.

NEW YORK

The HCUP New York files were constructed from the New York State Department of Health's Statewide Planning and Research Cooperative System (SPARCS) Master File. The New York files contain inpatient discharges from acute care hospitals in the state, excluding long-term care units of short-term hospitals and Federal hospitals. Some community hospitals, as defined by the AHA Annual Survey of Hospitals, may not be included in the HCUP SID because their data were not provided by the data source. In 1997, data from 1% of the community hospitals in New York were not received.

New York data are included in the HCUP SID beginning in 1988 and in the HCUP NIS beginning in 1993.

Exclusion of Records. The following New York records were excluded from the HCUP inpatient database:

- For all years, interim records for patients who had not been discharged.
- Beginning in 1994, records with a discharge disposition of "still a patient."

Inclusion of Stays in Special Units. The documentation supplied by the data source indicates that the data include stays in detoxification (alcohol and drug abuse), alcohol rehabilitation, mental retardation, mental rehabilitation, rehabilitation, alternate level of care, and psychiatric (acute and long term) units within community hospitals. Records for these different types of care cannot be identified from the data elements available in the HCUP New York inpatient data.

Inclusion of Non-community Hospitals. Source documentation provided by New York did not indicate that stays from specialty hospitals were included in the New York data.

OREGON

The 1993-1995 HCUP Oregon files were constructed from the Office for Oregon Health Plan Policy and Research discharge files. Beginning in 1996, HCUP Oregon files were constructed from discharge files supplied by the Oregon Association of Hospitals and Health Systems. The Oregon files consist of discharge abstract data for inpatient stays from member hospitals. Beginning in 1995, discharges from Veteran's Administrations facilities are not reported by the source. Some community hospitals, as defined by the AHA Annual Survey of Hospitals, may not be included in the HCUP SID because their data were not provided by the data source. In 1997, data from 3% of the community hospitals in Oregon were not received.

Oregon data are included in HCUP beginning in 1993.

Exclusion of Records. Beginning in 1995, the source reports the discharge disposition of "still a patient." These records were excluded from the HCUP Oregon data.

Inclusion of Stays in Special Units. Stays in special units within Oregon hospitals (e.g., psychiatric, rehabilitation, long-term care) are included in the source data and therefore in the HCUP inpatient database.

Inclusion of Non-community Hospitals. Source documentation provided by Oregon indicated that discharges from Veteran's hospitals were included in the Oregon data in 1994. Beginning in 1995, discharges from Veteran's Administration facilities were not included.

SOUTH CAROLINA

The HCUP South Carolina files were constructed from confidential data files supplied by the South Carolina State Budget and Control Board. The data include inpatient stays from South Carolina acute care hospitals. Some community hospitals, as defined by the AHA Annual Survey of Hospitals, may not be included in the HCUP SID because their data were not provided by the data source. In 1997, data from 8% of the community hospitals in South Carolina were not received.

South Carolina data are included in HCUP beginning in 1993.

Exclusion of Records. The following records were excluded from the HCUP South Carolina data:

- Beginning in 1994, discharges with disposition of "still a patient" were excluded from the HCUP inpatient database. This disposition was not used in 1993 and no exclusion was necessary for that year.

- Beginning in 1996, discharges with a disposition indicating "patient was admitted as an inpatient to this hospital" were excluded from the HCUP inpatient database. This disposition was not used prior to 1997, and no exclusion was necessary for those years.

- The 1996 data file supplied by South Carolina had a three fragmentary records scattered throughout the raw file. These records were deleted during the creation of the South Carolina Publicly Released SID.

Inclusion of Stays in Special Units. The documentation supplied by South Carolina indicates that stays in long term care units and facilities were excluded by South Carolina from the supplied data.

Inclusion of Non-community Hospitals. Source documentation provided by South Carolina did not indicate that stays from specialty hospitals were included in the South Carolina data.

WASHINGTON

The HCUP Washington files were constructed from the Washington Comprehensive Hospital Abstract Reporting System (CHARS) data received from the Washington State Department of Health. Washington supplied uniform bills for inpatient stays from all acute care units, alcohol dependency units, bone marrow transplant units, extended care units, psychiatric units, rehabilitation units, group health units, and swing bed units. Some community hospitals, as defined by the AHA Annual Survey of Hospitals, may not be included in the HCUP SID because their data were not provided by the data source. In 1997, data from 1% of the community hospitals in Washington were not received.

Washington data are included in HCUP beginning in 1988.

Inclusion of Stays in Special Units. The documentation provided by the data source indicates that stays in special units within a hospital are included in the data. Records for these different types of care can be identified by the fourth digit of the source-supplied hospital identifier (DSHOSPID) on each patient record:

None	=	General acute care
A	=	Alcohol Dependency Unit
B	=	Bone Marrow Transplant Unit
E	=	Extended Care Unit
H	=	Tacoma General/Group Health Combined
I	=	Group Health only at Tacoma Hospital
P	=	Psychiatric Unit
R	=	Rehabilitation Unit
S	=	Swing Bed Unit

Washington assigns this value to DSHOSPID based upon the type of unit discharging the patient.

Inclusion of Non-community Hospitals. Source documentation provided by Washington did not indicate that stays from specialty hospitals were included in the Washington data.

WISCONSIN

The HCUP Wisconsin files were constructed from confidential files received from the Bureau of Health Information, Wisconsin Department of Health and Family Services. Wisconsin supplied discharge data abstract and uniform bills for non-federal Wisconsin hospitals. Some community hospitals, as defined by the AHA Annual Survey of Hospitals, may not be included in the HCUP SID because their data were not provided by the data source. In 1997, data from all of the community hospitals in Wisconsin were received.

Wisconsin data are included in HCUP beginning in 1989.

Inclusion of Stays in Special Units. The documentation supplied by the data source does not indicate whether stays in special units within a hospital (e.g., psychiatric, rehabilitation, long-term care) are included in the data.

Inclusion of Non-community Hospitals. Source documentation provided by Wisconsin indicates that psychiatric facilities and alcohol and other drug abuse rehabilitation facilities are included in the Wisconsin data.

DESCRIPTION OF DATA ELEMENTS

This section of the codebook lists all data elements in the HCUP State Inpatient Databases (SID). For each data element, there are the following descriptive items:

- Name,
- Label,
- Value table,
- Explanation of the conversion of missing values in EBCDIC/ASCII files,
- Description of the HCUP uniform coding, and
- State-specific notes.

The notes are cumulative beginning with the 1988 HCUP SID.

ADATE Admission date

Variable	Description	Value	Value Description
ADATE	Admission date	YYMMDD . .A .B .C	Date of Admission Missing Invalid Unavailable from Source Inconsistent: ED011

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

ADATE is assigned a valid nonmissing date, with the following exceptions:

- If a data source does not supply admission year, month, and day, then ADATE = unavailable from the source (.B)

- If an admission date is supplied by the data source, but one or more of the components of the admission date (year, month, day) is

  Blank or a documented missing value, then ADATE = missing (.).

  OR

  Non-numeric or out-of-range (year NE 00-99, month NE 1-12, day NE 1-31), then ADATE = invalid (.A).

- If the admission day is inconsistent with the month (e.g., February 30), then ADATE = invalid (.A).

If the admission date is after the discharge date (ED011), then ADATE is set to inconsistent (.C).

All States

To ensure the confidentiality of patients, the day portion of the date stored in ADATE is overwritten with “01" during the creation of the Publicly Released SID. The month and year portion of the date remains unchanged. HCUP variables that are calculated from ADATE are computed before ADATE is masked.

Colorado

Beginning in 1997, Colorado provided the admission date (ADATE) with a four-digit year. In prior years, only a two-digit year was available.

New York

New York provided admission year and month, but did not provide the day. A day of “01" was imputed for all records. The imputed date was not used to calculate other variables or to perform edit checks.

ADAYWK Admission day of week

Variable	Description	Value	Value Description
ADAYWK	Admission day of week	1 2 3 4 5 6 7 . .A .B	Sunday Monday Tuesday Wednesday Thursday Friday Saturday Missing Invalid Unavailable from Source

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

Admission day of the week (ADAYWK) is calculated from the admission date (ADATE). If ADAYWK cannot be calculated (ADATE is missing or invalid), then:

- ADAYWK is set to the supplied admission day of the week, if available.

- ADAYWK is missing (.) if the supplied admission day of week is missing.

- ADAYWK is unavailable from data source (.B) if the data source does not supply either

– admission date (ADATE) or
– admission day of the week.

If ADAYWK is out of range (ADAYWK NE 1-7) or non-numeric, it is set to invalid (.A).

All States

Admission day of week (ADAYWK) is calculated from the admission date (ADATE) before ADATE is masked. To ensure the confidentiality of patients, the day portion of the date stored in ADATE is overwritten with “01" during the creation of the Publicly Released SID. The month and year portion of the date remains unchanged.

Maryland

During 1990-1992 HCUP processing, only the calculated admission day of week could be used to assign ADAYWK because Maryland did not report admission day of week.

Beginning in 1993, Maryland reported admission day of week. During HCUP processing, the reported admission day of week was assigned if ADAYWK could not be calculated from admission date.

New York

ADAYWK could not be calculated because New York did not report full admission dates. During HCUP processing, only the reported admission day of the week could be used to assign ADAYWK.

ADRG All Patient Refined DRG

Variable	Description	Value	Value Description
ADRG	All Patient Refined DRG	nnn . or 0 .A	APR DRG Missing Invalid

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

All Patient Refined DRGs (APR-DRGs) are a DRG refinement developed by 3M Health Information Services to improve upon the Refined DRGs developed at Yale University. They were enhanced by incorporating additional pediatric DRG modifications, recognizing the impact of multiple Complications and Comorbidities (CCs), and refined CC definitions. The APR-DRGs eliminated the HCFA DRG splits for CCs and death, and all but two of the age splits and replaced them with complexity subclasses.

Except for newborn DRGs, each patient is assigned to a complexity subclass (HCUP variable ADRGSEV). Assignment to a complexity subclass is based, in part, on the complexity of a patient's secondary diagnoses, interactions among secondary diagnoses, age, principle diagnosis, and the presence of certain non-operating room procedures.

APR-DRG codes are supplied by the data source. During HCUP processing, source values are maintained as reported. The two-digit APR-MDC code is stored in the variable AMDC. The three-digit APR-DRG code is stored in the variable ADRG. The one-digit complexity subclass is stored in ADRGSEV.

For more information see "All Patient Refined Diagnosis Related Groups (APR-DRGs)," published by 3M Health Information Services.

ADRGSEV All Patient Refined DRG severity level

Variable	Description	Value	Value Description
ADRGSEV	All Patient Refined DRG Complexity Subclass	0-4 . .A	APR DRG Severity Score Missing Invalid

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

ADRGSEV reports the complexity subclass for the All Patient Refined DRGs (APR-DRGs). This is an indicator of the extent of physiologic decompensation or organ system loss of function. With the exception of newborn patients, each APR-DRG is subdivided into four complexity subclasses. Newborn DRGs have a complexity code of zero (0). Assignment to a complexity subclass is based, in part, on the complexity of a patient's secondary diagnoses, interactions among secondary diagnoses, age, principle diagnosis, and the presence of certain non-operating room procedures.

Complexity Subclass	Description
1	Minor loss of function (includes cases with no comorbidity or complications (non CC))
2	Moderate loss of function
3	Major loss of function
4	Extreme loss of function

APR-DRG complexity subclass codes are supplied by the data source. During HCUP processing, the codes are assigned as reported, without modification.

For more information see "All Patient Refined Diagnosis Related Groups (APR-DRGs)," published by 3M Health Information Services.

AGE Age in years at admission

Variable	Description	Value	Value Description
AGE	Age in years at admission	0-124 . .A .B .C	Age in Years Missing Invalid Unavailable from Source Inconsistent: ED021, ED3nn, ED4nn, ED5nn

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

Age in years (AGE) is calculated from the birth date (DOB) and the admission date (ADATE) with the following exceptions:

- AGE is set to the supplied age if the age cannot be calculated (ADATE and/or DOB is missing or invalid).

  Note: If the supplied age is the age at discharge instead of the age at admission, then the supplied age is NOT used.

- AGE is missing (.) if the age cannot be calculated and the supplied age is missing.

- AGE is invalid (.A) if

  - it is out of range (AGE NE 0-124) or
  - the age cannot be calculated and the supplied age is non-numeric.

- AGE is inconsistent (.C) if AGE is inconsistent with AGEDAY (ED021), neonatal diagnoses (ED301-ED3nn), maternal diagnoses (ED401-ED4nn), or maternal procedures (ED501-ED5nn).

- AGE is unavailable from data source (.B) if the data source does not supply either

  - admission date (ADATE) and date of birth (DOB), or
  - age in years at admission.

An invalid/inconsistent calculated AGE is not replaced by the supplied age.

All States

When processing the 1996 HCUP inpatient data, no adjustment was made for the leap year when age was calculated from date of birth and admission date. This caused infants admitted on the day before their first birthday to have AGE=1 instead of AGE=0.

Age at admission (AGE) is calculated from the admission date (ADATE) before ADATE is masked. To ensure the confidentiality of patients, the day portion of the date stored in ADATE is overwritten with “01" during the creation of the Publicly Released SID. The month and year portion of the date remains unchanged.

Arizona

The reported age was not used when AGE could not be calculated because Arizona supplied age at discharge. The appropriate edit check for consistency of reported and calculated ages could not be performed.

California

In all years, California assigned the date of birth to admission date when the admission date was not reported and the discharge had a principal diagnosis indicating a newborn (defined as DX1 equal to V3x.0x). This caused the calculated age to be 0 days.

Prior to 1995, California reported ages at discharge. Only the calculated age was used to assign AGE. The appropriate edit check for consistency of reported and calculated ages could not be performed.

Beginning in 1995, California reported ages at admission. When AGE could not be calculated from dates, the reported age was assigned.

Florida

Beginning in 1997, patient age could not be calculated from dates since Florida did not report admission or birth dates. During HCUP processing, only the reported age could be used to assign AGE. The appropriate edit check for consistency of reported and calculated ages could not be performed.

Iowa

AGE may differ by one year from the actual age. When only the year of birth is available, Iowa assigns the day and month of birth to '01', which may cause the age calculated from birth date to be one year less than the actual age.

Massachusetts

Ages greater than 100 years should be interpreted with caution. Age is calculated using the birth and admission date, but only a two-digit year for date of birth (DOB) was provided by the data source.

An additional indicator variable provided by the data source, the "Century Birth date," indicates whether the age of the patient was greater or less than 100 years. HCUP Feasibility Study experience has shown that this indicator was often not set when it should have been. Thus, if the century indicator specified 1800 or the birth date occurred after the admit date, the century for the date of birth was set to 1800. If the birth date is erroneously after the admit date, this rule causes the age in years (AGE) to be incorrectly greater than 100. If the age does not agree with neonatal or maternal diagnoses and/or procedures, the age is set to inconsistent (.C).

New Jersey

Prior to 1994, New Jersey reports age as a two-digit code with a maximum of 99 and provides a birth century indicator. Beginning in 1994, New Jersey provides a four-digit birth year. If age could not be calculated (ADATE or DOB missing or invalid) then age was assigned as follows:

Year of Data	HCUP processing of AGE
1988-1991	If DOB is greater than ADATE, assign AGE as the reported age plus 100. Otherwise, assign AGE as the reported two-digit age.
1992-1993	If DOB is greater than ADATE, assign AGE as the reported age plus 100. Otherwise, assign AGE as the reported two-digit age and add 100 if the birth century flag indicates that the patient is age 100 or older.
Beginning 1994	Assign AGE as the reported age, if the reported AGE was in the range of 1-124 years. Otherwise, assign AGE as invalid (.A).

New York

AGE could not be calculated because New York did not report full admission and birth dates. During HCUP processing, only the reported age in years could be used to assign AGE. The appropriate edit check for consistency of reported and calculated ages could not be performed.

Oregon

Oregon reports age at discharge. During HCUP processing, reported age was not used when patient age (AGE) could not be calculated from dates. The appropriate edit check for consistency of reported and calculated ages could not be performed.

South Carolina

The calculation of AGE differs across years.

Beginning in 1996
Only a two-digit year for date of birth (DOB) was provided by the data source.

- If DOB > admission date (ADATE), the birth century was assigned as 18 (e.g., if ADATE = 01/02/88 and DOB = 01/03/88, then the birth year was set to 1888 and the calculated age was 99).

- If DOB <= ADATE, the birth century was assigned as 19 (e.g., if ADATE = 01/02/88 and DOB = 01/01/88, then the birth year was set to 1988 and the calculated age in years was 0).

Using only the admission date to determine births in the 1800s causes no patient ages to be greater than 99 years.

In 1993 and 1995
South Carolina reported a two-digit year for date of birth (DOB). During HCUP processing, the birth century was assigned as 1800 if the reported age was at least 100 or the reported date of birth was after the admission date. Birth century was assigned as 1900 for all other records.

In 1994
South Carolina reported a four-digit year for date of birth (DOB). No adjustments to birth century were made during HCUP processing.

Washington

Availability of Reported Age

During HCUP processing of 1988-1992 discharges, the reported age was not used when AGE could not be calculated because Washington reported age at discharge. The appropriate edit check for consistency of reported and calculated ages could not be performed.

Beginning with 1993 discharges, Washington reported age at time of admission, consistent with the HCUP definition of AGE. Therefore, if the patient's age could not be calculated from dates, the reported age was assigned to AGE.

Ages Greater Than 99 Years

For 1988-1992 discharges, due to the coding of date of birth, no patient ages are greater than 99 years. Only a two-digit year for date of birth (DOB) was provided by the data source.

- If DOB > admission date (ADATE), the birth century was assigned as 18 (e.g., if ADATE = 01/02/88 and DOB = 01/03/88, then the birth year was set to 1888 and the calculated age was 99).

- If DOB <= ADATE, the birth century was assigned as 19 (e.g., if ADATE = 01/02/88 and DOB = 01/01/88, then the birth year was set to 1988 and the calculated age in years was 0).

For 1993-1996 discharges, the birth century was assigned as 1800 if the reported age was at least 100 or the reported date of birth was after the admission date. Birth century was assigned as 1900 for all other record. The age range is not truncated at 99.

Beginning in 1997, the reported age was no longer used to indicate ages over 100. This is consistent with the coding of AGE in other states. The coding of AGE in 1997 is the same as specified for 1988-1992.

Wisconsin

An error during HCUP processing of 1989-1992 discharges caused age in years (AGE) and date of birth (DOB) to be set to missing (.) for all patients born in the year 1900. Beginning with 1993 discharges, AGE and DOB were processed correctly.

From 1989-1994, only the calculated age could be used to assign AGE because Wisconsin did not supply age in years. The appropriate edit check for consistency of reported and calculated ages could not be performed.

For 1995 discharges, the source supplied an age in years which was used if the age could not be calculated from date of birth and admission date.

Beginning in 1996, only the calculated age could be used to assign AGE because Wisconsin had truncated ages over 96 years to 96. The appropriate edit check for consistency of reported and calculated ages could not be performed.

AGEDAY Age in days (when < 1 year)

Variable	Description	Value	Value Description
AGEDAY	Age in days (when < 1 year)	0-364 . .A .B .C	Days Missing Invalid Unavailable from Source Inconsistent: ED021, ED3nn, ED4nn, ED5nn

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

Age in days (AGEDAY) is calculated from the birth date (DOB) and the admission date (ADATE) with the following exceptions:

- AGEDAY is set to the supplied age in days if the age cannot be calculated (ADATE and/or DOB is missing or invalid).

- AGEDAY is missing (.) if the age cannot be calculated and the supplied age in days is missing.

- AGEDAY is invalid (.A) if

  - it is out of range (AGEDAY NE 0-364) or
  - the age in days cannot be calculated and the supplied age in days is non-numeric.

- AGEDAY is inconsistent (.C) if AGEDAY in inconsistent with AGE (ED021), neonatal diagnoses (ED301-ED3nn), maternal diagnoses (ED401-ED4nn), or maternal procedures (ED501-ED5nn).

- AGEDAY is unavailable from data source (.B) if the data source does not supply either
  - admission date (ADATE) and date of birth (DOB), or
  - age in days at admission.

An invalid/inconsistent calculated AGEDAY is not replaced by the supplied age in days.

All States

When processing the 1996 HCUP inpatient data, no adjustment was made for the leap year when age was calculated from date of birth and admission date. This caused infants admitted on the day before their first birthday to have AGE=1 and AGEDAY = missing (.), instead of AGE=0 and AGEDAY=364.

Age in days(AGEDAY) is calculated from the admission date (ADATE) before ADATE is masked. To ensure the confidentiality of patients, the day portion of the date stored in ADATE is overwritten with “01" during the creation of the Publicly Released SID. The month and year portion of the date remains unchanged.

Arizona

Only the calculated age could be used to assign AGEDAY because Arizona did not supply age in days.

California

California assigned the date of birth to admission date when the admission date was not reported and the discharge had a principal diagnosis indicating a newborn (defined as DX1 equal to V3x.0x). This caused the calculated age to be 0 days.

Only the calculated age in days could be used to assign AGEDAY because California did not differentiate between same-day births and one-day olds.

Florida

Prior to 1997, only the calculated age could be used to assign AGEDAY because Florida did not supply age in days. Beginning in 1997, Florida provided AGEDAY.

Iowa

AGEDAY may be incorrectly set to invalid (.A) on newborn records. When only the year of birth is available, Iowa codes the day and month of birth to '01'. This causes the calculated age in days to be negative, and therefore set to invalid (.A).

Only the calculated age could be used to assign AGEDAY because Iowa did not supply age in days.

Massachusetts

Only the calculated age could be used to assign AGEDAY because Massachusetts did not supply age in days.

New Jersey

Only the calculated age could be used to assign AGEDAY because New Jersey did not supply age in days.

New York

AGEDAY could not be calculated because New York did not report full admission and birth dates. During HCUP processing, only the reported age in days could be used to assign AGEDAY.

Oregon

During HCUP processing, only the calculated age in days could be used to assign AGEDAY because Oregon did not report age in days.

South Carolina

Only the calculated age could be used to assign AGEDAY because South Carolina did not supply age in days.

Washington

Only the calculated age could be used to assign AGEDAY because Washington did not supply age in days.

AHAID AHA hospital identification number with the leading 6

Variable	Description	Value	Value Description
AHAID	AHA identification number with the leading 6	7(a)	AHA identification number

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

AHAID contains the 7-digit American Hospital Association (AHA) hospital identifier that the AHA uses on their yearly AHA Annual Survey of Hospitals data files. These files contain information about hospital characteristics and are available for purchase through the AHA.

The last 6 digits of AHAID are the same as IDNUMBER. AHAID has 7 digits and always includes a leading “6". IDNUMBER has 6 digits because the leading “6" has been removed.

All States

AHAID is only coded for community hospitals. HCUP uses the American Hospital Association’s definition of a community hospital which includes non-federal short-term hospitals whose facilities are available to the public. Short-term is defined as hospitals with an average length of stay less than 30 days. Both general and specialty hospitals (e.g., obstetrics and gynecology, rehabilitation, orthopedics, and eye, ear, nose and throat) are included. For non-community hospitals, AHAID is blank (" ").

AMDC All Patient Refined MDC

Variable	Description	Value	Value Description
AMDC	All Patient Refined MDC	nn . or 0 .A	APR MDC Missing Invalid

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

APR-MDC codes are supplied by the data source. During HCUP processing, source values are maintained as reported in AMDC. See the HCUP Uniform Coding Note under ADRG for more details.

California

Beginning in 1997, the California State Inpatient Database includes the All Patient Refined MDC (AMDC).

AMONTH Admission month

Variable	Description	Value	Value Description
AMONTH	Admission month	1-12 . .A .B	Admit Month Missing Invalid Unavailable from Source

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

Admission month (AMONTH) is derived from either the month of the admission date or the supplied admission month. A valid nonmissing month is assigned to AMONTH even if the admission year or day is invalid or missing. Therefore, it is possible to have a valid AMONTH when the admission date is invalid or missing.

If AMONTH is non-numeric or out-of-range (month NE 1-12), then AMONTH is invalid (.A).

If a data source does not supply admission month, then AMONTH is unavailable from the source (.B).

All States

Admission month (AMONTH) is calculated from the admission date (ADATE) before ADATE is masked. To ensure the confidentiality of patients, the day portion of the date stored in ADATE is overwritten with “01" during the creation of the Publicly Released SID. The month and year portion of the date remains unchanged.

ASCHED Admission scheduled vs. unscheduled

Variable	Description	Value	Value Description
ASCHED	Scheduled vs. unscheduled admission	0 1 . .A	Unscheduled Admit Scheduled Admit Missing Invalid

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

ASCHED uses source-specific coding.

California

Beginning in 1997, ASCHED is available. California defines a “Scheduled Admit” as scheduled at least 24 hours before admission. The source category “Infant, less than 24 hours old” is included in the uniform category “Unscheduled Admit” (ASCHED = 0).

Colorado

In 1993, Colorado began collecting ASCHED, but it was optional for hospitals to report this data to the hospital association.

Beginning in 1995, Colorado no longer reports ASCHED.

ASOURCE Admission source

Variable	Description	Value	Value Description
ASOURCE	Admission Source	1	Emergency Dept
		2	Another Hospital
		3	Other Health Facility Inc LTC
		4	Court/Law Enforcement
		5	Routine, Birth and Other
		.	Missing
		.A	Invalid
		.B	Unavailable from Source

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

ASOURCE indicates the source of the admission (emergency department; transfer from a hospital; routine, birth and other; etc.). Routine, birth, and other (ASOURCE=5) includes births and referrals from physicians, clinics, and HMOs. Transfer from a hospital may include transfers within the same hospital as well as transfers between hospitals.

Arizona

ASOURCE is unavailable from the source (.B) from January to June 1989 because the data source overwrote ASOURCE and ATYPE with zeros during this time period.

California

Newborns

In all years, California assigned all records containing a principal diagnosis code of "newborn, born in hospital" (defined as DX1 equal to V3x.0x) to an admission source of newborn, regardless of the admission source reported by the hospital. These discharges are included under the uniform category routine, birth, and other (ASOURCE = 5).

Home Health Service

Prior to 1995, the categories coded under routine, birth, and other (ASOURCE = 5) included an admission source of "Home Health Service."

Beginning in 1995, home health service is not reported by California as a separate category. No documentation is available from the source to indicate whether home health service is reported under another source category.

Court/Law Enforcement

Prior to 1995, the source documentation supplied by California does not indicate which source categories are used for "Court/Law Enforcement" (ASOURCE=4).

Beginning in 1995, the source reported a separate category for admissions from "Prison/Jail." These discharges are included under the uniform category "Court/Law Enforcement" (ASOURCE = 4).

Ambulatory Surgery

Beginning in 1995, the source reports a separate category for admissions from ambulatory surgery. These discharges are included under the uniform category "Other Facility, Including Long Term Care" (ASOURCE = 3).

Colorado

In 1993, Colorado began collecting ASOURCE, but it was optional for hospitals to report this data to the hospital association.

Beginning in 1997, Colorado reported the admission source, "Transfer from a Rural Primary Care Hospital." This was recoded to the HCUP uniform category "Another Hospital" (ASOURCE = 2).

Maryland

Emergency Room

Maryland flagged admissions through emergency rooms as a separate variable from the source of admission. During HCUP processing, admission source was coded as "Emergency Room" (ASOURCE = 1) if the patient was admitted through the emergency room (flag = 1) and admission source was reported as home, missing, or blank.

Other Facility Including Long-term Care

The following source codes were included in the HCUP category "Other Facility Including LTC" (ASOURCE = 3):

– "Lithotripsy Facility,"
– "On-site Ambulatory/Outpatient Unit,"
– "Off-site Ambulatory/Outpatient Unit."

Beginning in 1996, two additional source codes were included in the HCUP category "Other Facility Including LTC" (ASOURCE = 3):

– "On-site Sub-acute Facility", and
– "Other Sub-acute Facility."

Court/Law Enforcement

Maryland did not separately classify "Court/Law Enforcement" (ASOURCE = 4). The source documentation available for Maryland data did not indicate which admission source code(s) were used for "Court/Law Enforcement.

Massachusetts

For all years:

– The reported value "Other (including Level 4 nursing facility)" was included in the HCUP category "Routine, Birth and Other" (ASOURCE = 5).

Beginning in 1997, quarter 4:

- The source code for "Transfer from Outside Ambulatory Surgery" was included in the HCUP category "Other Facility, including LTC" (ASOURCE = 3).

- The source codes for "Outside Hospital Clinic Referral" and "Walk-in / Self-Referral" were included in the HCUP category "Routine, Birth and Other" (ASOURCE = 5).

Beginning in 1993, quarter 4:

- The source codes for "Ambulatory Surgery" and "Observation" were included in the HCUP category "Other Facility, including LTC" (ASOURCE = 3).

- The two source codes for "Extramural Birth" were included in the HCUP category "Routine, Birth and Other" (ASOURCE = 5).

The recoding of the source code for "Newborn, Admission Source Not Available" was handled differently across the years:

- For 1988-1992, the source code for "Newborn, Admission Source Not Available" was included in the HCUP category "Routine, Birth and Other" (ASOURCE = 5).

- Starting in 1993, the source code for "Newborn, Admission Source Not Available" was included in the HCUP category "Missing" (ASOURCE = .).

New Jersey

In 1995-1996, the admission source, "Transfer from a Rural Primary Care Hospital" was erroneously recoded to the HCUP uniform category "Other Facility, Including Long Term Care" (ASOURCE = 3). Beginning in 1997, the admission source "Transfer from a Rural Primary Care Hospital" was correctly recoded to the HCUP uniform category "Another Hospital" (ASOURCE = 2). This source value was not available from New Jersey prior to 1995.

New York

Admitted from Outpatient Department

For 1988-1992, the source category "Admitted From Outpatient Department" was recoded to the HCUP uniform category "Routine, Birth and Other" (ASOURCE = 5).

For 1993, New York recoded "Admitted From Outpatient Department" into the source category "Emergency Room" and during HCUP processing, it was assigned to the HCUP category "Emergency Department" (ASOURCE = 1).

Beginning in 1994, New York does not report "Admitted from Outpatient Department."

Transfer from a Rural Primary Care Hospital

Beginning in 1995, New York reported the admission source, "Transfer from a Rural Primary Care Hospital." This was recoded to the HCUP uniform category "Another Hospital" (ASOURCE = 2).

Other Source

For 1988-1992, the source category "Other Source" was recoded to the HCUP uniform category "Routine, Birth and Other" (ASOURCE = 5).

For 1993, New York recoded "Other Source" into the source category "Information Not Available" and during HCUP processing, it was assigned to the HCUP category "Missing" (ASOURCE = .).

Beginning in 1994, New York does not report "Other Source."

South Carolina

Beginning in 1996, South Carolina reported the admission source, "Transfer from a Rural Primary Care Hospital." This was recoded to the HCUP uniform category "Another Hospital" (ASOURCE = 2).

ATYPE Admission type

Variable	Description	Value	Value Description
ATYPE	Admission type	1	Emergency
		2	Urgent
		3	Elective
		4	Newborn
		5	Delivery
		6	Other
		.	Missing
		.A	Invalid
		.B	Unavailable from Source

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

ATYPE indicates the type of admission (emergency, urgent, elective, etc.). Newborn and delivery admission types are separated only if that information is available from the data source. No edit check comparing the admission type to diagnosis or procedure codes is performed.

Arizona

ATYPE is unavailable from the source (.B) from January to June 1989 because the data source overwrote ASOURCE and ATYPE with zeros during this time period.

Arizona does not separately classify deliveries. The source documentation supplied by Arizona does not indicate which source categories were used for deliveries.

Colorado

In 1995, Colorado began collecting admission type, but it was optional for hospitals to report this data to the hospital association.

Colorado does not separately classify deliveries. The source documentation supplied by Colorado does not indicate which source categories were used for deliveries.

Florida

Florida does not separately classify deliveries. According to the documentation available from the source, most normal deliveries are categorized as urgent (ATYPE = 2), and most cesarean births and some normal deliveries are included under elective (ATYPE = 3).

Iowa

Iowa does not separately classify deliveries. No documentation was available describing which admission types were used for deliveries.

Maryland

During HCUP processing of 1993 data, the source category "Rehabilitation" was erroneously recoded to the HCUP category "Invalid" (ATYPE = .A) instead of "Other" (ATYPE = 6). This was due to incomplete source documentation of admission type for 1993 data.

During HCUP processing for other years, the source category Rehabilitation was correctly recoded to the HCUP category "Other" (ATYPE=6).

Beginning in 1997, the source reported a separate category for “Psychiatric" admissions. These discharges are included under the uniform category "Other" (ATYPE = 6).

Massachusetts

Massachusetts does not separately classify deliveries. The source documentation supplied by Massachusetts does not indicate which source categories are used for deliveries.

New Jersey

New Jersey does not separately classify deliveries. No documentation was available describing which admission type(s) were used for deliveries.

New York

New York does not separately classify deliveries. No documentation was available describing which admission type(s) were used for deliveries.

Oregon

Oregon does not separately classify deliveries. No documentation was available about which admission type(s) were used for deliveries.

South Carolina

South Carolina does not separately classify deliveries. No documentation was available describing which admission type(s) were used for deliveries.

Washington

Washington does not separately classify deliveries. No documentation was available about which admission type(s) were used for deliveries.

Wisconsin

Wisconsin does not separately classify deliveries. No documentation was available describing which admission type(s) were used for deliveries.

BWT Birthweight in grams

Variable	Description	Value	Value Description
BWT	Birthweight	1 - 65,535 . .A	Grams Missing Invalid

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

Birthweight is coded in grams. No validity check is performed on the values except that values must be within the range from 1 to 65,535 grams.

No edit check comparing the birthweight to the diagnosis or procedure codes is performed.

Colorado

In 1993, Colorado began collecting birthweight of newborns, but it was optional for hospitals to report this data to the hospital association.

Maryland

For 1990-1992, birthweight was reported by Maryland but was not processed as an HCUP variable.

Beginning with 1993 discharges, birthweight is available in the HCUP Maryland data. Values of zero (0) were processed as valid weights and were not reset to missing (.).

Massachusetts

Beginning with 1997 discharges, birthweight is available in the HCUP Massachusetts data.

New York

New York rounded the birthweights for newborns with an AIDS diagnosis into units of 100 grams (i.e., a birthweight of 4582 grams was rounded to 4500 grams).

AIDS diagnoses are defined as 042nn, 043nn, 044nn, 1363n, 27910, 27919, 2793n, and 7958n. Beginning in 1995, diagnosis codes V08, 79571, and 0795n were also used to identify AIDS

babies.

CHGn Detailed charges

Variable	Description	Value	Value Description
CHGn	Charges, detailed	±7(n).nn . .A .B	Charges Missing Invalid Unavailable from Source

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

Detailed charges are retained as received from the data source, including cents and negative values. Zero charges are retained as a zero and are NOT set to missing (.). Charges greater than 9,999,999 are set to invalid (.A). No edit checking is performed on this variable.

Arizona

Beginning in 1995, the source reports detailed charges. Arizona uses the UB-92 revenue codes to group similar charges. For example, CHG8 “Nursery” includes all charges to the three-digit UB-92 revenue codes that begin with 17. This will include “Routine Newborn,” revenue code 170, and “Neo-Natal ICU,” revenue code 175.

Detailed charge categories for Arizona are:

CHG	Description	UB-92 Revenue Codes
CHG1	All Inclusive Room and Board	10x
CHG2	Room and Board, Private	11x
CHG3	Room and Board, Two Bed	12x
CHG4	Room and Board, 3-4 Beds	13x
CHG5	Private (Deluxe)	14x
CHG6	Room and Board, Ward	15x
CHG7	Room and Board, Other	16x
CHG8	Nursery	17x
CHG9	ICU	20x
CHG10	CCU	21x
CHG11	Special Charges	22x
CHG12	Incremental Charges	23x
CHG13	All Inclusive Ancillary	24x
CHG14	Pharmacy	25x
CHG15	IV Therapy	26x
CHG16	Medical/Surgical Supplies	27x
CHG17	Oncology	28x

CHG18	DME (Other than renal)	29x
CHG19	Laboratory	30x
CHG20	Laboratory Pathology	31x
CHG21	Radiology, Diagnostic	32x
CHG22	Radiology, Therapeutic	33x
CHG23	Nuclear Medicine	34x
CHG24	CT Scan	35x
CHG25	Operating Room	36x
CHG26	Anesthesia	37x
CHG27	Blood	38x
CHG28	Blood Storage/Processing	39x
CHG29	Other Imaging	40x
CHG30	Respiratory Services	41x
CHG31	Physical Therapy	42x
CHG32	Occupational Therapy	43x
CHG33	Speech Therapy	44x
CHG34	Emergency Room	45x
CHG35	Pulmonary Function	46x
CHG36	Audiology	47x
CHG37	Cardiology	48x
CHG38	Osteopathic Services	53x
CHG39	Ambulance	54x
CHG40	Medical Social Services	56x
CHG41	MRI	61x
CHG42	Medical Surgical Supplies (extension of revenue codes 27x)	62x
CHG43	Drugs requiring specific ID	63x
CHG44	Cast Room	70x
CHG45	Recovery Room	71x
CHG46	Labor/Delivery Room	72x
CHG47	EKG/ECG	73x
CHG48	EEG	74x
CHG49	Gastro Intestinal Services	75x
CHG50	Treatment/Observation Room	76x
CHG51	Lithotripsy	79x
CHG52	Inpatient Renal Dialysis	80x
CHG53	Organ Acquisition	81x
CHG54	Miscellaneous Dialysis	88x
CHG55	Psychiatric Treatment	90x
CHG56	Psychiatric Services	91x
CHG57	Other Diagnostic Services	92x
CHG58	Other Therapeutic Services	94x
CHG59	Professional Fees	96x
CHG60	Professional Fees	97x
CHG61	Professional Fees	98x
CHG62	Patient Convenience Items	99x
CHG63	All Other Charges	---

Colorado

The charge categories for Colorado are:

CHG1	Routine Charges (UB-92 Revenue Codes 100-239)
CHG2	Laboratory Charges (UB-92 Revenue Codes 300-319)
CHG3	Radiology Charges (UB-92 Revenue Codes 320-359, 400-409, 610-619)
CHG4	Pharmacy Charges (UB-92 Revenue Codes 250-259)
CHG5	All Other Charges (All other UB-92 Revenue Codes)

Florida

Starting in 1992, Florida supplied charge details by aggregated UB-82 revenue center categories. The following are the revenue centers associated with each variable. The small x refers to all valid digits within the general category, e.g., revenue center 11x refers to 110-119.

Variable	Category	Aggregated UB-82 Revenue Centers	
CHG1	Room Charges	11x-16x	
CHG2	Nursery	17x	
CHG3	Intensive Care	20x	(Not available in 1997)
CHG4	Coronary Care	21x	(Not available in 1997)
CHG5	Pharmacy	25x	(Not available in 1997)
CHG6	Medical/Surgical Supplies & Devices	27x	(Not available in 1997)
CHG7	Oncology	28x	
CHG8	Laboratory	30x	
CHG9	Laboratory Pathological	31x	
CHG10	Radiology-Diagnostic	32x	
CHG11	Radiology-Therapeutic	33x	
CHG12	Nuclear Medicine	34x	
CHG13	CT Scan	35x	
CHG14	Operating Room Service	36x	
CHG15	Anesthesia	37x	
CHG16	Respiratory Services	41x	
CHG17	Physical Therapy	42x	
CHG18	Occupational Therapy	43x	
CHG19	Emergency Room	45x	
CHG20	Cardiology	48x	
CHG21	Magnetic Resonance Imaging (MRI)	61x	
CHG22	Recovery Room	71x	
CHG23	Labor Room/Delivery	72x	
CHG24	Other (not covered by preceding revenue code groups)	---	

Iowa

Beginning in 1993, Iowa includes professional fees (CHG1) in its total charges if the hospital combines hospital and professional bills. Professional fees are subtracted from total charges (TOTCHG and TOTCHG_X) during HCUP processing to make Iowa total charges comparable to data from other states.

Maryland

For 1990-1992, detailed charges were reported by Maryland but were not processed as HCUP variables. Beginning in 1993, detailed charges are available for Maryland.

The charge categories for Maryland are:

CHG1	Medical/Surgical Acute Charges
CHG2	Coronary Care Charges
CHG3	Medical/Surgical Intensive Care Charges
CHG4	Nursery Charges
CHG5	Oncology Charges
CHG6	Skilled Nursing Care Charges
CHG7	Psychiatric Acute Charges
CHG8	Operating Room Charges
CHG9	Drug Charges
CHG10	Radiology Diagnostic Charges
CHG11	Radiology Therapeutic Charges
CHG12	Nuclear Medicine Charges
CHG13	CAT Scan Charges
CHG14	MRI Charges
CHG15	Cardiac Catheterization Charges
CHG16	Laboratory Charges
CHG17	Medical Supplies Charges
CHG18	Respiratory Therapy Charges
CHG19	Physical Therapy Charges
CHG20	Occupational Therapy Charges
CHG21	Speech and Audiology Charges
CHG22	Pulmonary Function Charges
CHG23	Anesthesiology Charges
CHG24	Blood Charges
CHG25	Emergency Room Charges
CHG26	Outpatient Clinic Charges
CHG27	Freestanding Clinic Charges
CHG28	Labor and Delivery Charges
CHG29	EKG Charges
CHG30	EEG Charges
CHG31	Other Charges

Massachusetts

Massachusetts included professional fees in its detailed and total charges, if these were included by the hospital. Hospitals are allowed, though not required, to report these professional fees in the detailed charges. Individual facilities decide which professional fees are included and where. There is no way to determine which hospitals did or did not include professional fees.

For 1988-1993, Massachusetts reported charge details and units by aggregated revenue center categories. Hospitals were responsible for mapping UB-82 revenue center codes into Massachusetts' revenue center categories. For example, all laboratory charges that would be charged to UB-82 revenue codes 300-312, 314, 319, and 971 were aggregated and reported to Massachusetts under one category.

Beginning in 1994, Massachusetts reported charge details and units by UB-92 revenue centers. Definitions of detail charges (CHGn) and units (UNITn) in the HCUP Massachusetts files do not necessarily match definitions in earlier years. Refer to the tables below for CHGn revenue center definitions.

The HCUP Massachusetts files for 1988-1993 include an "unknown revenue center" charge (CHG43) that is not included for subsequent years. Detailed charges, excluding the "unknown revenue center" charges, can be summed to the total charges (TOTCHG and TOTCHG_X).

Charge Categories Starting in 1994

In 1994, the HCUP Massachusetts State Inpatient Files included 81 charge categories. Beginning in the 4th quarter of 1997, seven more charge categories (CHG82-CHG88) were added. Data quality problems often appear in the first year that data elements are added, so use these data elements with caution. The following are the UB-92 revenue centers associated with each variable:

Included UB-92 Category	Variable	Revenue Center
Routine Medical/Surgical	CHG1	111
Routine Obstetrics	CHG2	112
Routine Pediatrics	CHG3	113
Routine Psychiatric	CHG4	114
Routine Hospice	CHG5	115
Routine Detoxification	CHG6	116
Routine Oncology	CHG7	117
Routine Rehabilitation	CHG8	118
Other Routine Accommodation	CHG9	119
Routine Newborn	CHG10	170
Neo-Natal ICU	CHG11	175
Medical/Surgical ICU	CHG12	200
Pediatric ICU	CHG13	203
Psychiatric ICU	CHG14	204
Post Care ICU	CHG15	206
Burn Unit	CHG16	207
Trauma ICU	CHG17	208

Other Special Care ICU	CHG18		209
Coronary Care Unit	CHG19		210
Myocardial Infarction Unit	CHG20		211
Pulmonary Care Unit	CHG21		212
Heart Transplant Unit	CHG22		213
Post Coronary Care Unit	CHG23		214
Other Coronary Care Unit	CHG24		219
Special Charges	CHG25		220
Incremental Nursing Charge Rate	CHG26		230
All Inclusive Ancillary	CHG27		240
Pharmacy	CHG28		250
IV Therapy	CHG29		260
Medical/Surgical Supplies	CHG30		270
Oncology	CHG31		280
Durable Medical Equipment	CHG32		290
Laboratory	CHG33		300
Laboratory Pathological	CHG34		310
Diagnostic Radiology	CHG35		320
Therapeutic Radiology	CHG36		330
Nuclear Medicine	CHG37		340
CAT Scan	CHG38		350
Surgical Service (OR)	CHG39		360
Anesthesia	CHG40		370
Blood	CHG41		380
Blood Storage/Processing	CHG42		390
Other Imaging Services	CHG43		400
Respiratory Services	CHG44		410
Physical Therapy	CHG45		420
Occupational Therapy	CHG46		430
Speech-Language Pathology	CHG47		440
Emergency Room	CHG48		450
Pulmonary Function	CHG49		460
Audiology	CHG50		470
Cardiology	CHG51		480
Ambulatory Surgical Care	CHG52		490
Outpatient Services before Admission (Invalid for Inpatient Services)	CHG53		500
Clinic (Invalid for Inpatient Purposes)	CHG54		510
Ambulance	CHG55		540
Medical Social Services	CHG56	560	
MRI	CHG57		610
Med./Surg. Supplies (extends 270)	CHG58		620
Drugs Req. Specific Identification	CHG59		630
Hospice Services	CHG60		650
Cast Room	CHG61		700
Recovery Room	CHG62		710
Labor Room/Delivery	CHG63		720
EKG/ECG	CHG64		730
EEG	CHG65		740
Gastro-Intestinal Services	CHG66		750
Treatment or Observation Room	CHG67		760
Lithotripsy	CHG68		790

Inpatient Renal Dialysis	CHG69	800	
Organ Acquisition	CHG70	810	
Dialysis (National Assignment)	CHG71	860	
Miscellaneous Dialysis	CHG72	880	
Other Donor Bank	CHG73	890	
Psychiatric/Psycholog. Treatments	CHG74	900	
Psychiatric/Psychological Services	CHG75	910	
Other Diagnostic Services	CHG76	920	
Other Therapeutic Services	CHG77	940	
Other Ancillary Services	CHG78	950	
Professional Fees	CHG79	960	
Professional Fees	CHG80	970	
Professional Fees	CHG81	980	
Chronic	CHG82	192	(Available 4th qtr 1997)
Sub-Acute	CHG83	196	(Available 4th qtr 1997)
TCU	CHG84	197	(Available 4th qtr 1997)
SNF	CHG85	198	(Available 4th qtr 1997)
Treatment Room	CHG86	761	(Available 4th qtr 1997)
Observation Room	CHG87	762	(Available 4th qtr 1997)
Other Observation Room	CHG88	769	(Available 4th qtr 1997)

Charge Categories in 1988-1993

For 1988-1993, the HCUP Massachusetts files include 43 charge categories. The following are the revenue centers associated with each variable:

Included UB-82 Category	Variable	Revenue Center
Routine Medical/Surgical	CHG1	111, 121, 131, 141, 151
Routine Obstetrics	CHG2	112, 122, 132, 142, 152
Routine Pediatrics	CHG3	113, 123, 133, 143, 153
Routine Psychiatric	CHG4	114, 124, 134, 144, 154
Routine Other	CHG5	119, 129, 139, 149, 159
Routine Newborn	CHG6	170, 171, 172, 179
Neo-Natal ICU	CHG7	175
Medical/Surgical ICU	CHG8	201, 202
Pediatric ICU	CHG9	203
Psychiatric ICU	CHG10	204
Burn Unit	CHG11	207
Other ICU	CHG12	209
Coronary Care Unit	CHG13	210
Pharmacy	CHG14	250-259
IV Therapy	CHG15	260
Medical/Surg Supplies	CHG16	270, 272-275, 277-279, 290-292, 299
Laboratory	CHG17	300-307, 309-312, 314, 319, 971
Diagnostic Radiology	CHG18	320-321, 324, 329, 400-402, 409, 972
Therapeutic Radiology	CHG19	330-333, 335, 339, 973
Nuclear Medicine	CHG20	340-342, 349, 974
CAT Scanner	CHG21	350-352, 359
Surgical Service (OR)	CHG22	360-362, 367, 369, 975

Anesthesiology	CHG23	370, 374, 379, 963-964
Blood	CHG24	380-382, 389
Blood Storage Proc & Adm	CHG25	390-391, 399
Respiratory Therapy	CHG26	410, 412-413, 419, 976
Physical Therapy	CHG27	420, 429, 977
Occupational Therapy	CHG28	430, 439, 978
Speech Therapy	CHG29	440, 449, 979
Emergency Room	CHG30	450, 459, 981
Pulmonary Function	CHG31	460, 469
Audiology	CHG32	470-472, 479
Cardiac Catheterization	CHG33	480-482, 489
Ambulance	CHG34	540-545, 549
Recovery Room	CHG35	710, 719
Labor and Delivery	CHG36	720-724, 729
EKG	CHG37	730-731, 739, 985
EEG	CHG38	740, 749, 922, 986
Renal Dialysis	CHG39	800-802, 805-814, 880-881
Kidney Acquisition	CHG40	860-866
Psychology/Psychiatry	CHG41	900-903, 909-919, 961
Other Ancillary	CHG42	280, 490, 499, 510-512, 519, 530-531, 539, 560, 700, 709, 750, 759, 890-893, 899, 920-921,929, 940-943, 949, 960, 962, 969, 984, 987, 988, 989
Unknown Revenue Center	CHG43	Includes charges for which the UB-82 revenue center was invalid, not used by Massachusetts Rate Setting Commission, or unspecified.

New Jersey

The charge categories from New Jersey are:

CHG1	Medical - Surgical Charges
CHG2	Obstetric Charges
CHG3	Pediatric Charges
CHG4	Psychiatric Charges
CHG5	Burn Care Unit Charges
CHG6	Intensive Care Unit Charges
CHG7	Coronary Care Unit Charges
CHG8	Neonatal Intensive Care Unit Charges
CHG9	Newborn Nursery Charges
CHG10	Emergency Room Charges
CHG11	Clinic Charges
CHG12	Home Health Charges
CHG13	Anesthesiology Charges
CHG14	Cardiac Catheterization Charges
CHG15	Delivery & / or Gyn Charges
CHG16	Dialysis Charges
CHG17	Drug or Pharmacy Charges
CHG18	Electrocardiogram Charges
CHG19	Laboratory Charges

CHG20	Medical Surgical Supply Charges
CHG21	Neurology Charges
CHG22	Nuclear Medicine Charges
CHG23	Occupational Therapy Charges
CHG24	Operating Room Charges
CHG25	Organ Acquisition Charges
CHG26	Physical Therapy Charges
CHG27	Psychiatric Charges
CHG28	Radiology Charges
CHG29	Respiratory Therapy Charges
CHG30	Speech Pathology Charges
CHG31	Therapeutic Radiology Charges
CHG32	Same Day Surgery Charges
CHG33	Excluded Charges
CHG34	Non-Acute Ancillary Charges
CHG35	Medicare, Part B, Non-Acute Charges

Warning: In 1995, a confusion over the mapping of Uniform Billing revenue codes to Neonatal Intensive Care Unit charges (CHG8) and newborn nursery charges (CHG9) caused some hospitals to erroneously place NICU charges (CHG8) under nursery charges (CHG9). This does not affect other years.

New Jersey includes professional fees in several charge categories because professional fees are aggregated within the revenue centers and the fees cannot be separated. There is no documentation available from the data source to determine where professional fees were included.

CHG12 (home health) and CHG35 (Medicare, Part B, non-acute) should only have been used for outpatient data, which are not included in the HCUP database. In most years, there are only a handful of records with non-zero charges in these categories.

New York

In all years,

CHG1-CHG5 contain accommodation charges and
CHG6-CHG25 contain ancillary charges.

Blood Charges

For 1988-1992, CHG26 contains blood charges but there is no associated revenue center.

For 1993, there are no blood charges included in the HCUP New York Inpatient data.

Beginning in 1994, blood charges are indicated by revenue centers 381 (packed red blood cells) and 382 (whole blood).

Revenue Codes for Detailed Charges

See note under revenue codes (REVCDn) for a definition of all of the revenue codes associated with these detailed charges (CHGn). Detailed charges (CHGn) are associated with the identified revenue centers (REVCDn), units of service (UNITn) and rates (RATEn). For example, CHG1

applies to the revenue center in REVCD1 for the rate in RATE1 and the units of service specified in UNIT1. Revenue codes are available for accommodation and ancillary charges. Units and rates are available for accommodation charges.

Adjustment to Charges for Interim Bills

For 1988-1992, when the length of stay from the Discharge Data Abstract did not equal the length of the billing period from the Uniform Billing Form, total charges (TOTCHG) and charge details (CHGn, RATEn, UNITn, REVCDn) were set to missing (.) because this billing information pertained only to the billing period, not the complete inpatient stay. However, TOTCHG_X contains the original value from the billing record.

Beginning in 1993, billing dates were not reported by New York and the adjustment to charge details (CHGn, RATEn, UNITn, REVCDn) was not made.

Oregon

Beginning in 1995, Oregon supplied ten detailed charge categories:

Variable	Charge Category
CHG1	ancillary charges
CHG2	room and board charges
CHG3	anesthesiology charges
CHG4	laboratory charges
CHG5	labor and delivery charges
CHG6	oncology charges
CHG7	operating room charges
CHG8	pharmacy charges
CHG9	radiology charges
CHG10	other charges

The ancillary charge (CHG1) is the sum of all charges except room and board charges (CHG3-CHG10).

Beginning in 1995, some hospitals reported detailed charges (CHG1-CHG10) but not total charges (TOTCHG and TOTCHG_X) on charity bills since there are no charges to the patient.

Beginning in 1995, some hospitals did not submit data for the detailed charge categories (CHG1-CHG10). Although total charges (TOTCHG and TOTCHG_X) were reported for these hospitals, detailed charges (CHG1-CHG10) are zero.

South Carolina

The number of detailed charges supplied by South Carolina changes across years.

Prior to 1995
South Carolina supplied 51 detailed charges and no charge for "Other Charges".

In 1995
South Carolina supplied 52 detailed charges. They created charge fields (CHG1-CHG51) that

were comparable to previous years and added a new charge field (CHG52) labeled “Other Charges”.

Starting in 1996
South Carolina supplied 78 detailed charges. Some charges are an addition to those previously supplied. For example, starting in 1996 there is a category for room and board charges from a Hospice. Other charges give more detail than previously supplied. For example, prior to 1996 there was one charge for ICU charges. Starting in 1996, there are 5 different ICU charges.

Starting in 1996, the detailed charge categories from South Carolina were:

CHG1	All Inclusive Rate
CHG2	Room & Board - General medical charges
CHG3	Room & Board - Psych charges
CHG4	Room & Board - Hospice charges
CHG5	Room & Board - Detox charges
CHG6	Room & Board - Oncology charges
CHG7	Room & Board - Rehab charges
CHG8	Room & Board - Other charges
CHG9	Nursery - Levels I & Other charges
CHG10	Nursery - Level II
CHG11	Nursery - Level III
CHG12	Nursery - Level IV
CHG13	ICU charges
CHG14	ICU - Pediatric charges
CHG15	ICU - Psych charges
CHG16	ICU - Intermediate ICU charges
CHG17	ICU - Burn Unit charges
CHG18	Coronary Care charges
CHG19	Coronary Care - Intermediate CCU charges
CHG20	Special charges
CHG21	Nursing acuity charges
CHG22	All Inclusive Ancillary
CHG23	Pharmacy charges
CHG24	IV Therapy charges
CHG25	Supplies charges
CHG26	Oncology charges
CHG27	Equipment charges
CHG28	Laboratory charges
CHG29	Radiology - Diagnostic charges
CHG30	Radiology - Therapeutic services charges
CHG31	Chemotherapy charges
CHG32	Radiation Therapy charges
CHG33	Nuclear medicine charges
CHG34	CT scan charges
CHG35	Operating room charges
CHG36	Anesthesia charges
CHG37	Blood charges
CHG38	Other Imaging charges
CHG39	PET Scan charges
CHG40	Respiratory therapy charges
CHG41	Physical therapy charges

CHG42	Occupational therapy charges
CHG43	Speech and Audiology charges
CHG44	Emergency room charges
CHG45	Pulmonary function charges
CHG46	Cardiology charges
CHG47	Cath lab charges
CHG48	Ambulatory surgical care (ASC) charges
CHG49	Outpatient services - general charges
CHG50	Outpatient Clinic services charges
CHG51	Outpatient Clinic - freestanding charges
CHG52	Other Inpatient services charges
CHG53	Ambulance services charges
CHG54	Skilled Nursing charges
CHG55	Home Health Agency (HHA) charges
CHG56	MRI charges
CHG57	Hospice charges
CHG58	Outpatient Special Resident charges
CHG59	Recovery room charges
CHG60	Labor room/delivery charges
CHG61	EKG charges
CHG62	EEG charges
CHG63	Gastro Intestinal charges
CHG64	Observation Beds charges
CHG65	Preventative Care services charges
CHG66	Vaccine Administration charges
CHG67	Lithotripsy charges
CHG68	Renal Dialysis - Inpatient charges
CHG69	Organ acquisition charges
CHG70	Dialysis Outpatient charges
CHG71	Psychiatric/Psychol services charges
CHG72	Other Therapy Rehabilitation charges
CHG73	Cardiac rehabilitation charges
CHG74	Alcohol and Drug rehabilitation charges
CHG75	Professional fees - Providers & Other Specialists charges
CHG76	Professional fees - Therapies & Lab charges
CHG77	Professional fees - Other & Outpatient services charges
CHG78	Patient Convenience charges

Prior to 1996, the detailed charge categories from South Carolina were:

CHG1	Room & Board - general medical charges
CHG2	Room & Board - psychology charges
CHG3	Room & Board - detoxification charges
CHG4	Room & Board - oncology charges
CHG5	Room & Board - rehabilitation charges
CHG6	Room & Board - other charges
CHG7	Nursery charges
CHG8	Premature nursery charges
CHG9	Neonatal ICU charges
CHG10	ICU charges
CHG11	CCU charges
CHG12	Nursing acuity charges

CHG13	Pharmacy charges
CHG14	Supplies charges
CHG15	Equipment charges
CHG16	Laboratory charges
CHG17	Radiology charges
CHG18	Chemotherapy charges
CHG19	Radiology-therapeutic services charges
CHG20	Nuclear medicine charges
CHG21	CT scan charges
CHG22	Operating room charges
CHG23	Anesthesia charges
CHG24	Blood charges
CHG25	PET scan charges
CHG26	Respiratory therapy charges
CHG27	Physical therapy charges
CHG28	Other therapy charges
CHG29	Emergency room charges
CHG30	Pulmonary function charges
CHG31	Cardiology charges
CHG32	Cardiac Catheterization lab charges
CHG33	Ambulatory surgical services charges
CHG34	Ambulance services charges
CHG35	MRI charges
CHG36	Recovery room charges
CHG37	Labor room/delivery charges
CHG38	EKG charges
CHG39	EEG charges
CHG40	Observation charges
CHG41	Lithotripsy charges
CHG42	Inpatient renal dialysis charges
CHG43	Organ acquisition charges
CHG44	Miscellaneous dialysis charges
CHG45	Psychiatric/psychological treatment charges
CHG46	Cardiac rehabilitation charges
CHG47	Complex medical equipment charges
CHG48	Professional fees
CHG49	Other inpatient charges
CHG50	Other outpatient charges
CHG51	Invalid revenue code charges
CHG52	Other charges (valid beginning in 1995)

Washington

Detailed charges (CHGn) are associated with the identified revenue centers (REVCDn) and the units of service (UNITn). For example, CHG1 applies to the revenue center in REVCD1 and the units of service specified in UNIT1.

Units are not required for all revenue sources; the units field may be coded as missing (.) or zero.

DCCHPRn CCHPR: Diagnosis n

Variable	Description	Value	Value Description
DCCHPRn	Clinical Classifications Software (CCS), formerly known as Clinical Classifications for Health Policy Research (CCHPR): Diagnosis classification	1 - 260 . .A	CCS Diagnosis Classification No Diagnosis code Invalid Diagnosis code

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

Clinical Classifications Software (CCS), formerly known as Clinical Classification for Health Policy Research (CCHPR), consists of 260 diagnosis categories. This system is based on ICD-9-CM codes that are valid for 1988 through 1997. All diagnosis codes are classified. All E-codes (External Causes of Injury and Poisoning) are combined into the last category, 260.

DCCHPRn is coded as follows:

- DCCHPRn ranges from 1 to 260 if the diagnosis code (DXn) is valid by the HCUP criteria, which allows a six-month window (three months before and three months after) around the official ICD-9-CM coding changes (usually October 1), for anticipation of or lags in response to official ICD-9-CM coding changes.

- DCCHPRn is set to invalid (.A), if the diagnosis code (DXn) is invalid (DXVn = 1).

- DCCHPRn is missing (.), if there is no diagnosis code (DXn = " ").

DCCHPRn is retained (values 1-260) when a valid diagnosis is flagged as inconsistent with age or sex (DXVn = .C). For best results, use DCCHPRn only when the diagnosis is valid and consistent (DXVn = 0).

Labels

Labels for CCS, formerly known as CCHPR, categories are provided as an ASCII file in *SID Tools*.

Formats

Formats to label CCS, formerly known as CCHPR, categories are documented in *SID Tools*. Both sixteen- and forty-character labels are available.

A format is also available to map CCS codes into a few broad classes of conditions based on

ICD-9-CM chapters. These formats are also documented in *SID Tools*.

DDATE Discharge date

Variable	Description	Value	Value Description
DDATE	Discharge date	YYMMDD . .A .B	Date of Discharge Missing Invalid Unavailable from Source

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

DDATE is assigned a valid nonmissing date, with the following exceptions:

- If a data source does not supply discharge year, month, and day, then DATE = unavailable from the source (.B)

- If a discharge date is supplied by the data source and one or more of the components of the discharge date (year, month, day) is

  Blank or a documented missing value, then DDATE = missing (.).

  OR

  Non-numeric or out of range (year NE 00-99, month NE 1-12, day NE 1-31), DDATE = invalid (.A).

- If the discharge day is inconsistent with the month (e.g., February 30), then DDATE = invalid (.A).

All States

To ensure the confidentiality of patients, the day portion of the date stored in DDATE is overwritten with “01" during the creation of the Publicly Released SID. The month and year portion of the date remains unchanged. HCUP variables that are calculated from DDATE are computed before DDATE is masked. The following describes the assignment of DDATE before the variable is masked.

Colorado

Beginning in 1997, Colorado provided the discharge date (DDATE) with a four-digit year. In prior years, only a two-digit year was available.

New York

New York provided discharge year and month, but did not provide the day. A day of '01' was imputed for all records. The imputed date was not used to calculate other variables or to perform edit checks.

DIED Died during hospitalization

Variable	Description	Value	Value Description
DIED	Died during hospitalization	0 1 . .A .B	Did not die Died Missing Invalid Unavailable from Source

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

This variable is coded from disposition of patient (DISP).

- If DISP indicates that a patient was discharged alive (values 1-7), then DIED is coded as 0.

- If DISP indicates that a patient died in the hospital (value 20), then DIED is coded as 1.

- If DISP is missing (.), invalid (.A), or unavailable from the source (.B), then DIED is also missing (.), invalid (.A), or unavailable from the source (.B).

New Jersey

In 1994, New Jersey reported that Englewood Hospital and Medical Center (DSHOSPID = 00450) incorrectly reported transfers to other hospitals as deaths.

DISP Disposition of patient

Variable	Description	Value	Value Description
DISP	Disposition of patient	1	Routine
		2	Short-term Hospital
		3	Skilled Nursing Facility (SNF)
		4	Intermediate Care Facility (ICF)
		5	Another Type of Facility
		6	Home Health Care (HHC)
		7	Against Medical Advice (AMA)
		20	Died
		.	Missing
		.A	Invalid
		.B	Unavailable from Source

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

DISP indicates the disposition of the patient at discharge (routine, transfer to another hospital, died, etc.).

The distinction between discharged to a skilled nursing facility (DISP = 3) and intermediate care facility (DISP = 4) may be defined differently for different data sources.

Arizona

In 1995, Arizona added the disposition "Home IV Provider." This is recoded to the HCUP discharge disposition Home Health Care (DISP = 6).

California

Beginning in 1995, California differentiates the discharge disposition to care within the same facility and discharges to another facility. Patients discharged to another level of care (e.g., long term care, residential care, and other care) were included in the uniform category "Another Type of Facility" (DISP = 5) regardless of whether the patient was physically transferred to another hospital or stayed in the same facility. Discharges to acute care were included in the uniform category "Short-Term Hospital" (DISP = 2).

Beginning in 1995, the source reports a separate category for discharges to "Prison/Jail." These discharges were included in the uniform category "Routine" (DISP = 1).

Colorado

Beginning in 1997, Colorado reports two new categories for discharge disposition:

- "Hospice - Medical Facility" which was recoded to the HCUP category "Another type of facility" (DISP = 5), and
- "Hospice - Home" which was recoded to the HCUP category "Home Health Care" (DISP = 6).

Florida

Prior to 1997, the source category of “Discharged Home on IV Medications” was recoded to the HCUP discharge disposition of Home (DISP = 1). Beginning in 1997, this source category was recoded to Home Health Care (DISP = 6) to be consistent with the coding of this discharge disposition in other states.

Maryland

Another Type of Facility

The following source codes were included in the HCUP category "Another Type of Facility" (DISP = 5):

– "Rehab Facility,"
– "Rehab Unit-Other Hosp," and
– "On-site Distinct Rehab Unit."

Beginning in 1996, three additional source codes were included in the HCUP category "Another Type of Facility" (DISP = 5):

– "On-site Psychiatric Unit,"
– "On-site Sub-acute Facility", and
– "Other Sub-acute Facility."

Intermediate Care Facility

Maryland does not separately classify the disposition of Intermediate Care Facility (DISP = 4). No documentation was available about which discharge disposition was used for Intermediate Care Facility.

Massachusetts

For all years:

- The source codes for "Discharge Other" were included in the HCUP category "Missing"

(DISP = .).

Beginning in 1993, quarter 4:

- The source codes for "Further Care - Inpatient or Outpatient Department" and "Rest Home" were included in the HCUP category "Another Type of Facility" (DISP = 5).

New Jersey

Beginning in October 1995, New Jersey reports two new categories for discharge disposition:

- "Hospice - Medical Facility" which was recoded to the HCUP category "Another type of facility" (DISP = 5), and

- "Hospice - Home" which was recoded to the HCUP category "Home Health Care" (DISP = 6).

In 1994, New Jersey reported that Englewood Hospital and Medical Center (DSHOSPID = 00450) incorrectly reported transfers to other hospitals as deaths.

New York

In All Years

The source category "Neonatal Aftercare" was recoded to the HCUP uniform category "Short-Term Hospital" (DISP = 2).

The source category "Psychiatric Chronic Care Facility" was recoded to the HCUP uniform category "Another Type of Facility" (DISP = 5).

Residential Health Care Facility

For 1988-1992, the source coded "Intermediate Care Facility" and "Residential Health Care Facility" in a single category. This was recoded to the HCUP category "Intermediate Care Facility (ICF)" (DISP = 4).

For 1993, New York included "Residential Health Care Facility" with their category for "Skilled Nursing Facility." This was assigned to the HCUP category "Skilled Nursing Facility" (DISP = 3). "Intermediate Care Facility" was coded in its own category.

Beginning in 1994, the source reports "Domiciliary Health Care Facility" in place of "Residential Health Care Facility." This was recoded to "Another Type of Facility" (DISP = 5).

Tertiary Aftercare

Beginning in 1994, the source reports "Transferred to Another Hospital for Tertiary Aftercare." This was recoded to the HCUP category "Short-Term Hospital" (DISP = 2).

Hospice

Beginning in October 1995, New York reports two new categories for discharge disposition:

- "Hospice - Medical Facility" which was recoded to the HCUP category "Another type of facility" (DISP = 5), and

- "Hospice - Home" which was recoded to the HCUP category "Home Health Care" (DISP = 6).

Expired

Beginning in 1997, New York reports three new categories coded under died (DISP = 20):

- "Expired at home,"
- "Expired at a medical facility," and
- "Expired, place unknown."

Oregon

According to Oregon's 1993 report to HCUP on their data practices, some Oregon hospitals do not differentiate discharges to home (DISP = 1) and discharges to home health care (DISP = 6). These discharges would be reported in the HCUP Oregon data as discharges to home (DISP = 1). Information on more recent practices is not available.

Prior to 1995, Oregon did not report discharges to "Other short-term facility" (DISP = 2) although the category was included in the source documentation. Beginning in 1995, this discharge disposition was reported.

Beginning in 1997, Oregon reports two new categories for discharge disposition:

- "Hospice - Medical Facility" which was recoded to the HCUP category "Another type of facility" (DISP = 5), and

- "Hospice - Home" which was recoded to the HCUP category "Home Health Care" (DISP = 6).

South Carolina

In addition to the usual categories coded under died (DISP = 20), the following dispositions are include:

- "Expired at home,"
- "Expired at a medical facility," and
- "Expired, place unknown."

Beginning in 1996, South Carolina reports two new categories for discharge disposition:

- "Hospice - Medical Facility" which was recoded to the HCUP category "Another type of facility" (DISP = 5), and

- "Hospice - Home" which was recoded to the HCUP category "Home Health Care" (DISP = 6).

Wisconsin

Beginning in 1995, Wisconsin reports two new categories:

- "Hospice - Medical Facility" which was recoded to the HCUP category "Another type of facility" (DISP = 5), and

- "Hospice - Home" which was recoded to the HCUP category "Home Health Care" (DISP = 6).

DOB Date of birth

Variable	Description	Value	Value Description
DOB	Date of birth	YYYYMMDD . .A .B	Date of Birth Missing Invalid Unavailable from Source

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

DOB is assigned a valid nonmissing birthdate, with the following exceptions:

- If a data source does not supply birth year, month, and day, then DOB = unavailable from the source (.B)

- If a date of birth is supplied by the data source, and if one or more of the components of the birthdate (year, month, day) is

  Blank or a documented missing value, DOB = missing (.).

  OR

  Non-numeric or out-of-range (year NE 00-99, month NE 1-12, day NE 1-31), DOB = invalid (.A).

- If the day of birth is inconsistent with the month (e.g., February 30), then DOB = invalid (.A).

If the birthdate is confirmed to be a valid date, but the calculated age is negative:

- DOB remains unchanged, and
- AGE and AGEDAY are set to invalid (.A).

HCUP retains birth dates that may have an incorrect birth century (e.g., January 1, 1999 instead of January 1, 1899), in order to retain a correct month and day.

All States

To ensure the confidentiality of patients, the day portion of the date stored in DOB is overwritten with “01" during the creation of the Publicly Released SID. The month and year portion of the date remains unchanged. HCUP variables that are calculated from DOB are computed before DOB is masked.

Arizona

The coding of date of birth (DOB) and the use of the reported age differs across years:

Starting in 1996: Arizona reported a four-digit year for date of birth (DOB). If the reported four-digit birth year was greater than the admission year then the original date of birth remains unchanged and the age at admission (AGE and AGEDAY) was set to invalid (.A). The reported age was not used because it is the age at the time of discharge.

1995: Arizona reported a two-digit year for date of birth (DOB). During HCUP processing, the birth century was assigned as 1800 if the reported age was at least 100 or the reported date of birth was after the admission date. Birth century was assigned as 1900 for all other records.

Prior to 1965: Arizona reported a four-digit year for date of birth(DOB). If the reported four-digit birth year was greater than the admission year, the reported age was checked. If the reported age was greater than the two-digit discharge, DOB is imputed as a date in 1800, instead of 1900. For example, if a 1993 discharge had a reported date of birth of January 1, 1999 and a reported age of 94, then DOB was set to January 1, 1899.

Due to an error during HCUP processing of 1990 and 1991 discharges, some birthdates in January 1999 were converted to incorrect SAS missing values. DOB should have retained the erroneous date, however, DOB was set to .B or .C by mistake.

Birthdates of January 3, 1999 were set to .B; birthdates of January 4, 1999 were set to .C. The following distribution of missing values for date of birth (DOB) was generated:

Value	1990 Count	1991 Count
.B	2	2
.C	1	0

DOB was processed correctly for discharges in years other than 1990 and 1991.

Iowa

When only the year of birth is available, Iowa assigns the day and month of birth to '01'.

New York

New York provided birth year and month, but did not provide day of birth. A day of '01' was imputed for all records. The imputed date was not used to calculate other variables or to perform edit checks.

DQTR Discharge quarter

Variable	Description	Value	Value Description
DQTR	Discharge quarter	1 2 3 4 0	First Quarter (Jan - Mar) Second Quarter (Apr - Jun) Third Quarter (Jul - Sep) Fourth Quarter (Oct - Dec) Missing or Invalid

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

Discharge quarter (DQTR) is derived from either the month of the discharge date or the supplied discharge quarter. If both of those fields are invalid or missing, DQTR is set to zero. For these cases, a temporary discharge quarter = 3 was used for the DRG grouper and ICD-9-CM verification routines because these algorithms require a valid discharge quarter.

Florida

Beginning in 1997, Florida did not supply discharge date. DQTR was assigned from the discharge quarter provided by Florida and not calculated from discharge date.

DRG DRG in effect on discharge date

Variable	Description	Value	Value Description
DRG	DRG in use on discharge date	nnn	DRG

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

This is the Diagnosis Related Group (DRG) appropriate for the date of discharge assigned by the HCFA DRG Grouper algorithm during HCUP processing.

Diagnosis and Procedures Used for DRG Assignment

Beginning in 1996, the DRG grouper can handle a maximum of 50 diagnosis and 50 procedure codes. Only diagnoses and procedure that are valid on the date of discharge are used by the grouper for DRG assignment.

From 1988 - 1995, the DRG grouper cannot handle more than 15 diagnoses and 15 procedures. Therefore, the following rules were used when more than 15 diagnoses or 15 procedures were available:

- the principal diagnosis/procedure (regardless of validity) is retained in DX1/PR1. No secondaries are shifted into the principal position.

- the first 14 valid (by HCUP standards) additional diagnosis or procedure codes are passed to the HCFA DRG grouper.

Different Definitions of Diagnosis and Procedure Validity

HCUP validation of diagnosis and procedure codes allows a six-month window (three months before and three months after)around the official ICD-9-CM coding changes (usually October 1), for anticipation of or lags in response to official ICD-9-CM coding changes. The DRG Grouper rules differ in two ways:

- diagnosis and procedure codes must be valid on the date of discharge to be used for assigning the DRG; and

- some valid diagnoses (E-codes) are ruled by the DRG Grouper to be invalid if entered as a principal diagnosis.

This inconsistency between the definition of a valid diagnosis or procedure is obvious when a discharge has a valid principal diagnosis (DXV1=0), but the assigned DRG is 470 "Ungroupable." Consider a discharge with DX1="V300" on October 1, 1989. The diagnosis code "V300" is

considered valid by HCUP standards (DXV1=0) because until September 30, 1989 "V300" is a valid ICD-9-CM code. The DRG Grouper does not recognize the "V300" code on October 1, 1989 and therefore groups the record to "Ungroupable," DRG=470 and MDC=0.

Changes in DRG Grouper Logic

Until the eighth DRG version (before October 1, 1990), the first step in the determination of the DRG had been the assignment of the appropriate MDC based on the principal diagnosis. Starting in October 1990, there are two types of exceptions:

- The principal diagnosis is not the initial variable in DRG assignment when the initial step in DRG assignment is based on a procedure. If a patient has a liver transplant (DRG 480), a bone marrow transplant (DRG 481) or tracheostomy (DRG 482 and 483), then the patient is assigned to these DRGs independent of the MDC assigned from the principal diagnosis.

- Assignment to MDC 24 (multiple trauma) and MDC 25 (patients with HIV infection) is based on BOTH principal diagnosis and procedure.

The Need for a Valid Discharge Date

The DRG grouper needs a valid discharge date because DRG versions change at specific points in time. If the discharge date was invalid or not available from a data source, a temporary discharge date (for use only by the DRG grouper) was created based on the discharge quarter and year according to the following rules:

- Discharge year (YEAR) is always nonmissing.

- Discharge quarter (DQTR) ranges from zero to 4, where zero indicates that the quarter was missing or invalid.

Discharge Quarter (DQTR)	Temporary Date (MM/DD/YY) passed to DRG Grouper
1	01/01/YY
2	04/01/YY
3	07/01/YY
4	10/01/YY
0	07/01/YY

Labels

Labels for the DRGs are provided as an ASCII file in *SID Tools*.

California

One discharge in 1991 with an invalid principal diagnosis code (DXV1=1) and at least one non-missing secondary diagnosis code (DX2, etc.) had the incorrect DRG and MDC assigned

because of a error in HCUP processing. The DRG should have been 470; and the MDC should have been equal to 0.

No other years are affected.

Massachusetts

Some 1989-1990 discharges with a missing principal diagnosis code (DX1=" ") and at least one non-missing secondary diagnosis code (DX2, etc.) have the incorrect DRG and MDC assigned because of an error in HCUP processing. The DRG should be 470; and the MDC should be equal to 0. The following number of records are affected: 1 record in 1989 and 1 record in 1990.

Some 1988-1991 discharges with an invalid principal diagnosis code (DXV1=1) and at least one non-missing secondary diagnosis code (DX2, etc.) have the incorrect DRG and MDC assigned because of an error in HCUP processing. The DRG should be 470; and the MDC should be equal to 0. The following number of records are affected:

- for 1988, 34 records;
- for 1989, 30 record;
- for 1990, 44 records; and
- for 1991, 33 records.

Beginning with 1992 discharges, DRG and MDC were processed correctly.

Washington

Some 1988-1992 discharges with an invalid principal diagnosis code (DXV1 = 1) and at least one non-missing secondary diagnosis code (DX2, etc.) have the incorrect DRG and MDC assigned because of an error in HCUP processing. The DRG should be 470; and the MDC should be equal to 0. The following number of records are affected:

- for 1988, 184 records;
- for 1989, 68 records;
- for 1990, 13 records;
- for 1991, 1 record; and
- for 1992, 1 record.

Beginning with 1993 discharges, DRG and MDC were processed correctly.

Wisconsin

According to source documentation, the principal and secondary procedures for one hospital (DSHOSPID="056" and HOSPID=55155) are incorrect in the fourth quarter of 1997. System problems at the hospital caused the last procedure coded on the medical record to be stored as the principal procedure. No secondary procedures were recorded. This affects the DRG, DRG10, MDC, and MDC10 assignment.

Some 1989-1992 discharges with an invalid principal diagnosis code (DXV1=1) and at least one

non-missing secondary diagnosis code (DX2, etc.) have the incorrect DRG and MDC assigned because of an error in HCUP processing. The DRG should be 470; and the MDC should be equal to 0. The following number of records are affected:

- for 1989, 23 records;
- for 1990, 4 records;
- for 1991, 1 record; and
- for 1992, 10 records.

Beginning with 1993 discharges, DRG and MDC were processed correctly.

DRG10 DRG, Version 10

Variable	Description	Value	Value Description
DRG10	DRG, Version 10	nnn	DRG

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

This is the Version 10 Diagnosis Related Group assigned by the HCFA DRG Grouper algorithm during HCUP processing.

Diagnosis and Procedures Used for DRG Assignment

Beginning in 1996, the DRG grouper can handle a maximum of 50 diagnosis and 50 procedure codes. Only diagnoses and procedure that are valid on the date of discharge are used by the grouper for DRG assignment.

From 1988 - 1995, the DRG grouper cannot handle more than 15 diagnoses and 15 procedures. Therefore, the following rules were used when more than 15 diagnoses or 15 procedures were available:

- the principal diagnosis/procedure (regardless of validity) is retained in DX1/PR1. No secondaries are shifted into the principal position.

- the first 14 valid (by HCUP standards) additional diagnosis or procedure codes are passed to the HCFA DRG grouper and 3M Mapper software.

Logically Mapping ICD-9-CM Codes for DRG Version 10

The diagnoses or procedures selected by the above rules are first passed to the 3M Mapper software so that each ICD-9-CM code can be logically translated into codes in effect during fiscal year 1992, the period associated with DRG Version 10. The translated codes are then passed to the DRG Version 10 HCFA Grouper software. Caution: The 3M Mapper can translate only those codes with a discharge date occurring after September 30, 1988. Therefore, codes which changed definition on October 1, 1988 may not be properly handled.

Different Definitions of Diagnosis and Procedure Validity

HCUP validation of diagnosis and procedure codes allows a six-month window (three months before and three months after) around the official ICD-9-CM coding changes (usually October 1), for anticipation of or lags in response to official ICD-9-CM coding changes. The DRG Grouper rules differ in two ways:

- diagnosis and procedure codes must be valid on the date of discharge to be used for

assigning the DRG; and

- some valid diagnoses (E-codes) are ruled by the DRG Grouper to be invalid if entered as a principal diagnosis.

This inconsistency between the definition of a valid diagnosis or procedure is obvious when a discharge has a valid principal diagnosis (DXV1=0), but the assigned DRG is 470 "Ungroupable." Consider a discharge with DX1="V300" on October 1, 1989. The diagnosis code "V300" is considered valid by HCUP standards (DXV1=0) because until September 30, 1989 "V300" is a valid ICD-9-CM code. The DRG Grouper does not recognize the "V300" code on October 1, 1989 and therefore groups the record to "Ungroupable," DRG=470 and MDC=0.

Changes in DRG Grouper Logic

Until the eighth version (before October 1, 1990), the first step in the determination of the DRG had been the assignment of the appropriate MDC based on the principal diagnosis. Starting in October 1990, there are two types of exceptions:

- The principal diagnosis is not the initial variable in DRG assignment when the initial step in DRG assignment is based on a procedure. If a patient has a liver transplant (DRG 480), a bone marrow transplant (DRG 481) or tracheostomy (DRG 482 and 483), then the patient is assigned to these DRGs independent of the MDC assigned from the principal diagnosis.

- Assignment to MDC 24 (multiple trauma) and MDC 25 (patients with HIV infection) is based on BOTH principal diagnosis and procedure.

Labels

Labels for the DRGs are provided as an ASCII file in *SID Tools*.

California

One discharge in 1991 with an invalid principal diagnosis code (DXV1=1) and at least one non-missing secondary diagnosis code (DX2, etc.) had the incorrect DRG10 and MDC10 assigned because of a error in HCUP processing. The DRG10 should have been 470; and the MDC10 should have been equal to 0.

No other years are affected.

Massachusetts

Some 1989-1990 discharges with a missing principal diagnosis code (DX1=" ") and at least one non-missing secondary diagnosis code (DX2, etc.) have the incorrect DRG10 and MDC10 assigned because of an error in HCUP processing. The DRG10 should be 470; and the MDC10 should be equal to 0. The following number of records are affected: 1 record in 1989 and 1 record in 1990.

Some 1988-1991 discharges with an invalid principal diagnosis code (DXV1=1) and at least one

non-missing secondary diagnosis code (DX2, etc.) have the incorrect DRG10 and MDC10 assigned because of an error in HCUP processing. The DRG10 should be 470; and the MDC10 should be equal to 0. The following number of records are affected:

- for 1988, 34 records;
- for 1989, 30 record;
- for 1990, 44 records; and
- for 1991, 33 records.

Beginning with 1992 discharges, DRG10 and MDC10 were processed correctly.

Washington

Some 1988-1992 discharges with an invalid principal diagnosis code (DXV1 = 1) and at least one non-missing secondary diagnosis code (DX2, etc.) have the incorrect DRG and MDC assigned because of an error in HCUP processing. The DRG should be 470; and the MDC should be equal to 0. The following number of records are affected:

- for 1988, 184 records;
- for 1989, 68 records;
- for 1990, 13 records;
- for 1991, 1 record; and
- for 1992, 1 record.

Beginning with 1993 discharges, DRG10 and MDC10 were processed correctly.

Wisconsin

According to source documentation, the principal and secondary procedures for one hospital (DSHOSPID="056" and HOSPID=55155) are incorrect in the fourth quarter of 1997. System problems at the hospital caused the last procedure coded on the medical record to be stored as the principal procedure. No secondary procedures were recorded. This affects the DRG, DRG10, MDC, and MDC10 assignment.

Some 1989-1992 discharges with an invalid principal diagnosis code (DXV1=1) and at least one non-missing secondary diagnosis code (DX2, etc.) have the incorrect DRG10 and MDC10 assigned because of an error in HCUP processing. The DRG10 should be 470; and the MDC10 should be equal to 0. The following number of records are affected:

- for 1989, 23 records;
- for 1990, 4 records;
- for 1991, 1 record; and
- for 1992, 10 records.

Beginning with 1993 discharges, DRG10 and MDC10 were processed correctly.

DRGVER DRG grouper version used on discharge date

Variable	Description	Value	Value Description
DRGVER	Grouper version in use on discharge date	4	4th revision, effective Oct 1, 1987
		5	5th revision, effective Oct 1, 1988
		6	6th revision, effective Oct 1, 1989
		7	7th revision, effective Oct 1, 1990
		9	Version 9, effective Oct 1, 1991
		10	Version 10, effective Oct 1, 1992
		11	Version 11, effective Oct 1, 1993
		12	Version 12, effective Oct 1, 1994
		13	Version 13, effective Oct 1, 1995
		14	Version 14, effective Oct 1, 1996
			(Continued as necessary)

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

DRGVER is assigned by the HCFA DRG grouper during HCUP processing. For discharges occurring before October 1, 1991, DRGVER contains the DRG "revision" number. For discharges after that date, DRGVER contains the DRG "version" number (which is one value higher than the revision number). This coding scheme is consistent with the labeling of the DRG reference material, including the DRG coding books. Thus, on September 30, 1991 the DRGVER = 7; but on October 1, 1991 the DRGVER = 9.

DSHOSPID Data source hospital identification number

Variable	Description	Value	Value Description
DSHOSPID	Data source hospital number	13(a)	State Hospital identification Number

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

The hospital identifier as provided by the data source. The hospital entity as defined by the data source may differ from the hospital entity used for HCUP (variable HOSPID), because HCUP defines hospitals in accordance with the American Hospital Association Annual Survey of Hospitals.

California

Included with the general acute care discharges from community hospitals are discharges from skilled nursing, intermediate care, rehabilitation, alcohol/chemical dependency treatment, and psychiatric units.

Stays in these different types of units can be identified by the first digit of the source hospital identifier (DSHOSPID):

0	=	Type of unit unknown (beginning in 1996)
1	=	General acute care
2	=	Not a valid code
3	=	Skilled nursing and intermediate care (long term care)
4	=	Psychiatric care
5	=	Alcohol/chemical dependency recovery treatment
6	=	Acute physical medicine rehabilitation care.

The reliability of this indicator for the type of care depends on how it was assigned.

Prior to 1995

The type of care was assigned by California based on the hospital's licensed units and the proportion of records in a batch of submitted records that fall into each Major Diagnostic Category (MDC). Hospitals were permitted to submit discharge records in one of two ways: submit separate batches of records for each type of care OR bundle records for all types of care into a single submission. How a hospital submitted its records to California determined the accuracy of the type of care indicated in the first digit of DSHOSPID. Consider a hospital which is licensed for more than one type of care:

- If the hospital submitted one batch of records per type of care, then the distribution of

each batch of discharges into MDCs would clearly indicate the type of care (acute, psychiatric, etc.). The data source could then accurately assign the first digit of DSHOSPID.

- If the same hospital submitted all of its records in one batch, then the distribution of discharges into MDCs would be a mixture of acute and other types of care. The first digit of DSHOSPID would be set to "general acute care" (value = 1) on all records and would not distinguish the types of care.

Prior to 1995, most hospitals submitted only one batch of records to California which meant that the type of care indicated in the first digit of DSHOSPID did not distinguish among types of care.

Beginning in 1995

Hospitals were required to assign type of care codes to individual records for certain discharges. These discharges included:

- general acute care (value = 1),
- skilled nursing and intermediate care (value = 3), and
- rehabilitation care (value = 6).

For discharges from facilities licensed as psychiatric care (value = 4) or alcohol/chemical dependency recovery treatment (value = 5), California continued to assign the type of care code to all discharges from the facility.

Florida

In 1997, Florida supplied a hospital identifier in a field of length 8 instead of length 6. Most of the 1997 Florida hospital identifiers (DSHOSPID) were still 6 characters long and matched previous years. There were 50 hospital identifiers (DSHOSPID) that were not present in previous years of data that were 8 characters long.

- 35 of these DSHOSPIDs are psychiatric facilities that are new to the Florida State Inpatient Database.
- 6 of these DSHOSPIDs are nursing home units that in previous years were included in major facilities, but in 1997 report separately.
- The remaining DSHOSPIDs are acute care facilities that in previous years were included in major facilities, but in 1997 report separately.

Oregon

Beginning with 1995 data, Oregon changed the format of the hospital identification numbers stored in DSHOSPID. The new format is incompatible with the format used in previous years.

Washington

Included with the records of general acute care stays from community hospitals are records from alcohol dependency units, bone marrow transplant units, extended care units, psychiatric units,

rehabilitation units, group health units, and swing bed units. Records for these different types of care can be identified by the fourth digit of the supplied hospital identifier (DSHOSPID) on each patient record:

None		General acute care
A	=	Alcohol Dependency Unit
B	=	Bone Marrow Transplant Unit
E	=	Extended Care Unit
H	=	Tacoma General/Group Health Combined
I	=	Group Health only at Tacoma Hospital
P	=	Psychiatric Unit
R	=	Rehabilitation Unit
S	=	Swing Bed Unit

Washington assigns this value to DSHOSPID based upon the type of unit discharging the patient.

DSNDX Maximum number of diagnoses provided by source

Variable	Description	Value	Value Description
DSNDX	Number of diagnosis fields in this data source	0 - 30	Total diagnoses possible

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

The maximum number of diagnosis codes that could occur on a discharge record from that data source, as of the date of discharge. This number may change over time.

DSNPR Maximum number of procedures provided by source

Variable	Description	Value	Value Description
DSNPR	Number of procedure fields in this data source	0 - 30	Total procedures possible

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

The maximum number of procedure codes that could occur on a discharge record from that data source, as of the date of discharge. This number may change over time.

DSNUM Data source identification number

Variable	Description	Value	Value Description
DSNUM	Data source number	nn	Data Source Number

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

The data source number is assigned in the order in which the different data sources are processed. Therefore, the first data source processed has DSNUM = 1; the second data source has DSNUM = 2, and so forth.

DSTYPE Data source type

Variable	Description	Value	Value Description
DSTYPE	Data source type	1 2 3 9	State Data Organization Hospital Association Consortia Other

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

DSTYPE is a categorical variable that identifies whether the discharge comes from a state data organization, a private data organization (e.g., a hospital association), or some sub-state (e.g., regional, metropolitan) data source.

DXn Diagnosis n

Variable	Description	Value	Value Description
DXn	Diagnosis	annnn blank	Diagnosis Code Missing

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

The original value of the principal diagnosis (DX1), whether blank or coded, is retained; secondary diagnoses are never shifted into the principal position during HCUP data processing.

Invalid and inconsistent diagnoses (DXn) are retained on the record. Use the validity flags (DXVn) in connection with any analysis of the diagnoses (DXn).

Diagnoses are compared to a list of ICD-9-CM codes valid for the discharge date. Anticipation of or lags in response to official ICD-9-CM coding changes are permitted for discharges occurring within six months of (three months before and three months after) the official ICD-9-CM coding changes (usually October 1). For example, the code for Single Liveborn changed from "V300 " to "V3000" as of October 1, 1989. Under HCUP validation procedures, "V300 " is classified as valid for discharges as late as December 31, 1989, and "V3000" is classified as valid for discharges as early as July 1, 1989.

Valid and invalid values are retained; null values are set to blank. The following are examples of invalid diagnosis codes that remain unchanged but are flagged as invalid:

- Garbage "x3yz2"
- Not left-justified " nnnn"
- Intermittent blanks "nn nn"
- Zero filled "00000"

Invalid diagnoses are flagged as follows:

- The value of DXn is unchanged,
- DXVn is set to 1, and
- DCCHPRn is set to invalid (.A).

Diagnoses that are inconsistent with sex coded on the record (ED101-ED1nn) or the patient's age (ED301-ED3nn and ED401-ED4nn) are flagged as follows:

- The value of DXn is unchanged,
- DXVn is set to inconsistent (.C), and
- DCCHPRn is retained (values 1-260).

Arizona

Beginning with 1995 discharges, Arizona reports two "cause of injury" E-codes in separate variables. During HCUP processing, these E-codes are placed after the last non-missing diagnosis code if they are not already recorded as a secondary diagnosis.

Arizona reports diagnosis codes with an explicit decimal point. The decimal point was removed during HCUP processing.

California

HIV Test Result Diagnoses

California law prohibits the release of HIV test results in patient-identifiable form to any outside party without the patient's consent. Therefore, records that include certain ICD-9-CM codes that indicate HIV test results were not included in the data supplied for HCUP. California eliminated all occurrences of these codes from the diagnosis fields and packed the diagnosis vectors to cover gaps from such removals.

The following ICD-9-CM codes were affected:

- From January 1988 to October 1, 1994, diagnosis codes of 044.x or 795.8 were removed by the data source prior to submitting data to HCUP.

- Beginning October 1, 1994, diagnosis codes of 795.71 or V08 were removed by the data source prior to submitting data to HCUP. These ICD-9-CM codes replaced the earlier codes.

HIV-related diagnoses 042.x and 043.x were unaffected.

The number of such diagnoses eliminated from the principal diagnosis position will be smaller than it otherwise might have been due to a practice in California that actively discourages the reporting of codes for HIV test results (044.x, 795.8, 795.71, and V08) as a principal diagnosis. During data editing, California flags discharges reporting one of these codes in the principal diagnosis position and then calls the submitting hospital to ask if the principal diagnosis should be changed. Hospitals have the option of deleting the code, changing it, or leaving it in place.

Shriner's Hospitals

Shriner's hospitals do not report diagnoses, procedures or total charges.

Psychiatric Diagnoses

Prior to 1995, some hospitals reported psychiatric diagnoses in DSM III which California then converted into ICD-9-CM diagnosis codes. The ICD-9-CM diagnosis codes are included in the HCUP database.

Beginning in 1995, some psychiatric hospitals began submitting data for primary diagnosis according to DSM IV criteria. DSM IV codes are indistinguishable in appearance from ICD-9-CM codes but have substantially different meanings. Because of similarities in the coding structure, the source was unable to convert the DSM IV codes to ICD-9-CM codes. DSM IV codes may occur in the HCUP data. Psychiatric hospitals may be included in the California data; no

documentation was available on the use of DSM IV codes in psychiatric units of acute care hospitals.

E-Codes

Beginning with 1990 discharges, the source reports five "cause of injury" E-codes as separate variables. During HCUP processing, E-codes were placed after the last non-missing diagnosis code.

California does not require the reporting of E-codes in the range E870-E879 (misadventures and abnormal reactions).

Iowa

Beginning in 1994, Iowa reports "cause of injury" E-codes. During HCUP processing, this separately reported E-code variable was placed at the end of the diagnosis vector; since the vector is packed during processing to remove blanks, the position of the E-code for a specific discharge depends on the number of diagnoses reported.

Maryland

Beginning in 1993, Maryland reports "cause of injury" E-codes as a separate variable. During HCUP processing, this separately reported E-code was placed after the last non-missing secondary diagnosis.

Maryland supplied diagnosis codes in a field of length 7. Only the first five characters contained in the left-justified source field were used to assign the HCUP diagnosis codes.

Massachusetts

Beginning in 1993, Massachusetts reported one "cause of injury" E-code. During HCUP processing, the separately reported E-code was placed after the last non-missing secondary diagnosis. E-codes can appear in other secondary diagnosis codes.

New Jersey

Before 1994, the diagnosis codes provided by the state were right-padded with zeros (e.g., the diagnosis code ’436’ was supplied as ’43600’). For the HCUP database the following algorithm was used to validate the diagnosis codes:

Check the five-digit code for validity (using a six-month window for coding changes, 3 months before and 3 months after October of each year when ICD-9-CM coding changes occur).

1) If the five-digit code is valid, set DXn to the five-digit code and set DXVn = 0.

2) If the five-digit code is invalid and the fifth digit is a zero**, create a four-digit code by deleting the trailing zero and re-check for validity (using six-month window for coding changes). If the four-digit code is valid, set DXn to the four-digit code and set DXVn = 0.

In 1993 only
DXn erroneously retained the original invalid five-digit code, instead of the valid four-digit code. DXVn was set to 0 to indicate a valid diagnosis, and DCCHPRn was set based on the valid diagnosis. There was no effect on the other diagnosis-related variables DRG, MDC, DRG10, MDC10, NEOMAT and edit check variables ED100, ED1nn, ED3nn, ED4nn, ED600, and ED601.

3) If the four-digit code is invalid and the fourth digit is a zero**, create a three-digit code by deleting the trailing zero and re-check for validity (using six-month window for coding changes). If the three-digit code is valid, set DXn to the three-digit code and set DXVn = 0.

In 1993 only
DXn erroneously retained the original invalid five-digit code, instead of the valid three-digit code. DXVn was set to 0 to indicate a valid diagnosis, and DCCHPRn was set based on the valid diagnosis. There was no effect on the other diagnosis-related variables DRG, MDC, DRG10, MDC10, NEOMAT and edit check variables ED100, ED1nn, ED3nn, ED4nn, ED600, and ED601.

4) If the five-, four- and three-digit codes are invalid, save the original five-digit code and set the validity flag to indicate an invalid code (DXVn = 1).

**** In 1993 only
An error in HCUP processing caused invalid five-digit codes that ended in non-zeros, as well as zeros, to be processed by the above algorithm. If deleting the rightmost non-zero digits created a valid code, then

- DXn was set to the original invalid five digit code,
- DXVn was set 0 to indicate a valid code,
- DCCHPR was set based on the stripped valid code, and
- DRG, MDC, DRG10, MDC10, NEOMAT and edit check variables ED100, ED1nn, ED3nn, ED4nn, ED600, and ED601 may have been incorrectly assigned based on the stripped valid code.

E-Codes

Beginning with 1993 discharges, New Jersey reports "cause of injury" E-codes as a separate variable. During HCUP processing, this E-code was placed after the last non-missing diagnosis code.

New York

Beginning in 1993, New York reports "cause of injury" and "place of injury" E-codes. During HCUP processing, these separately reported E-codes were placed after the last non-missing secondary diagnosis.

When a "cause of injury" E-code in the range of E850.0 to E869.9 or E880.0 to E928.9 was reported then a "place of injury" E-code was also reported.

If the hospital stay involved the possibility of classifying more than one situation or event, only the single cause of injury, poisoning, or adverse effect that was most severe was reported.

Oregon

Oregon reports "cause of injury" E-codes as a separate variable. During HCUP processing, this separately reported E-code was placed after the last non-missing secondary diagnosis.

Oregon supplied diagnosis codes in a field of length 6. Only the first five characters contained the diagnosis code and were used to assign the HCUP diagnosis codes.

South Carolina

Beginning in October 1994, South Carolina reports "cause of injury" E-codes, with the exception of medical misadventures.

Washington

Washington reported diagnosis codes in a field of length 6 for 1988-1992 and, beginning in 1993, in a field of length 7. Only the first five characters contain the diagnosis code and were used to assign the HCUP diagnosis code.

In 1988, Washington did not report "cause of injury" E-codes. From 1989-1992, Washington reports two "cause of injury" E-codes. Beginning in 1993, Washington reports only one "cause of injury" E-code. During HCUP processing, any separately reported E-code was placed after the last non-missing secondary diagnosis. Washington does not require hospitals to report E-codes in the range E870-E879 (misadventures and abnormal reactions) to the state data organization.

Wisconsin

To comply with statutory requirements, Wisconsin modified diagnosis and procedure codes that explicitly referenced induced termination of pregnancy to eliminate distinctions between induced and spontaneous termination. The following codes were modified:

- Diagnoses with the first three digit of 634, 635, 636, 637, 638 were recoded to 637, while retaining the reported fourth digit,
- Procedure 6901 was changed to 6902,
- Procedure 6951 was changed to 6952,
- Procedure 6993 was changed to 6999,
- Procedure 7491 was changed to 7499,
- Procedure 750 was changed to 7599, and
- Procedures 9641-9649 were changed to 964 (which would be flagged as invalid, PRV=1).

Wisconsin reports one "cause of injury" E-code. During HCUP processing, this separately reported E-code was placed after the last non-missing secondary diagnosis.

DXSYS Diagnosis coding system

Variable	Description	Value	Value Description
DXSYS	Diagnosis system	1 . .A	ICD-9-CM Missing Invalid

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

DXSYS indicates the coding system for the diagnoses. DXSYS = 1 indicates ICD-9-CM.

DXVn Validity flag: Diagnosis n

Variable	Description	Value	Value Description
DXVn	Diagnosis validity flag	0 1 . .C	Valid code Invalid code No diagnosis code Inconsistent: ED1nn, ED3nn, ED4nn

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

DXVn are validity flags that identify invalid or inconsistent diagnosis in the variables DXn. There is one validity flag for each diagnosis, i.e., DXV1 is the validity flag for DX1.

The following are acceptable values for DXVn:

0 indicates a valid and consistent diagnosis code.

1 indicates an invalid code for the discharge date. A six-month window around the discharge date (three months before and three months after) is allowed for anticipation of or lags in response to official ICD-9-CM coding changes.

. indicates a missing (blank) diagnosis code.

C indicates that the code is inconsistent with other data (i.e., age or sex) on the discharge abstract. See the Technical Supplement on *Quality Control in HCUP Data Processing* for more information.

HOSPID HCUP hospital identification number

Variable	Description	Value	Value Description
HOSPID	Hospital number	5(n)	HCUP hospital identification number

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

HCUP defines hospitals in accordance with the American Hospital Association Annual Survey of Hospitals. The hospital identifier as defined in HCUP is coded as:

SSnnn, where SS = State FIPS Code, and
nnn = hospital number unique to state.

The hospital entity as defined by HOSPID may differ from the data source hospital entity (variable DSHOSPID).

All States

HOSPID is only coded for community hospitals. HCUP uses the American Hospital Association's definition of a community hospital which includes non-federal short-term hospitals whose facilities are available to the public. Short-term is defined as hospitals with an average length of stay less than 30 days. Both general and specialty hospitals (e.g., obstetrics and gynecology, rehabilitation, orthopedics, and eye, ear, nose and throat) are included. For non-community hospitals, HOSPID is missing (.).

HOSPST Hospital state postal code

Variable	Description	Value	Value Description
HOSPST	Hospital State postal code	aa	Hospital State postal code

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

HOSPST indicates the hospital's two-character state postal code (e.g., "CA" for California).

HOSPSTCO Hospital modified FIPS state/county code

Variable	Description	Value	Value Description
HOSPSTCO	Hospital modified FIPS state/county code	5(n)	Hospital Modified FIPS State/County Code

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

HOSPSTCO indicates the five-digit state and county modified FIPS code listed for that hospital in the American Hospital Association Annual Survey of Hospitals. Each hospital has only one unique state/county code. If multiple hospital units are in different counties, HOSPSTCO is the county code of the primary facility (as indicated by American Hospital Association Annual Survey information).

HOSPSTCO can be used to link HCUP data to any other data set that uses the modified FIPS county code, such as the Area Resource File and the American Hospital Association Annual Survey of Hospitals.

All States

HOSPSTCO is only coded for community hospitals. HCUP uses the American Hospital Association's definition of a community hospital which includes non-federal short-term hospitals whose facilities are available to the public. Short-term is defined as hospitals with an average length of stay less than 30 days. Both general and specialty hospitals (e.g., obstetrics and gynecology, rehabilitation, orthopedics, and eye, ear, nose and throat) are included. For non-community hospitals, HOSPSTCO is missing (.).

IDNUMBER AHA hospital identification number without the leading 6

Variable	Description	Value	Value Description
IDNUMBER	AHA identification number without the leading 6	6(a)	AHA identification number

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

IDNUMBER contains a HCUP-modified American Hospital Association (AHA) hospital identifier. The AHA uses a 7-digit hospital identifier on their yearly AHA Annual Survey of Hospitals data files. These files contain information about hospital characteristics and are available for purchase through the AHA.

IDNUMBER has only 6 digits because the leading “6" has been removed for the original AHA hospital identifier. The variable AHAID has 7 digits and contains the original AHA identifier.

All States

IDNUMBER is only coded for community hospitals. HCUP uses the American Hospital Association’s definition of a community hospital which includes non-federal short-term hospitals whose facilities are available to the public. Short-term is defined as hospitals with an average length of stay less than 30 days. Both general and specialty hospitals (e.g., obstetrics and gynecology, rehabilitation, orthopedics, and eye, ear, nose and throat) are included. For non-community hospitals, IDNUMBER is blank (" ").

LOS Length of stay (cleaned)

Variable	Description	Value	Value Description
LOS	Length of stay, cleaned	0 - 32,767 . .A .B .C	Days Missing Invalid Unavailable from Source Inconsistent: ED011, ED601, ED911, ED921

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

Length of stay (LOS) is calculated by subtracting the admission date (ADATE) from the discharge date (DDATE). Same-day stays are therefore coded as 0. Leave days are not subtracted. Before edit checks are performed, LOS and LOS_X have the same value. If LOS is set to inconsistent (.C), the value of LOS_X is retained.

LOS is not equal to the calculated value in the following cases:

- LOS is set to the supplied length of stay if the length of stay cannot be calculated (ADATE and/or DDATE is missing or invalid). Note: If the supplied length of stay codes same-day stays as 1 or subtracts leave days, then the supplied length of stay is NOT used.

- LOS is missing (.) if the length of stay cannot be calculated and the supplied length of stay is missing.

- LOS is invalid (.A) if

- it is greater than the maximum allowed during HCUP processing (LOS > 32,767) or
- the length of stay cannot be calculated and the supplied length of stay is non-numeric.

- LOS is inconsistent (.C) if LOS is negative (ED011), unjustifiably longer than 365 days (ED601), or charges per day are unjustifiably low (ED911) or high (ED921).

- LOS is unavailable from data source (.B) if the data source does not supply either

- admission date (ADATE) and discharge date (DDATE), or
- length of stay.

An invalid/inconsistent calculated LOS is not replaced by the supplied length of stay.

All States

Length of stay(LOS) is calculated from the admission date (ADATE) and discharge date (DDATE)

before these dates are masked. To ensure the confidentiality of patients, the day portion of the dates stored in ADATE and DDATE are overwritten with “01" during the creation of the Publicly Released SID. The month and year portion of these dates remains unchanged.

Arizona

For 1989-1994, the reported length of stay was not used when LOS could not be calculated because Arizona coded same-day stays with a value of 1 and subtracted days of absence from LOS. The appropriate edit check for consistency of reported and calculated length of stay could not be performed.

Beginning in 1995, the source reports same-day stays as zero days. The supplied length of stay was used to assign LOS when length of stay could not be calculated from dates.

Colorado

The reported length of stay was not used when LOS could not be calculated because Colorado:

- coded same-day stays with the value 1 and
- subtracted days of absence.

The appropriate edit check for consistency of reported and calculated length of stay could not be performed.

Florida

Beginning in 1997, the coding of LOS and LOS_X is inconsistent with the coding of length of stay in other states. Florida provided the reported length of stay but not the admission and discharge date necessary for calculating LOS. Florida codes same-day stays as LOS=1; the HCUP standard coding of same-day stays is LOS=0. Usually 2% of a states’ discharges are same-day stays. The appropriate edit check for consistency of reported and calculated length of stay could not be performed.

Prior to 1997, the reported length of stay was not used when LOS could not be calculated because Florida:

- coded same-day stays with the value 1 and
- subtracted days of absence.

The appropriate edit check for consistency of reported and calculated length of stay could not be performed.

Iowa

The reported length of stay was not used when LOS could not be calculated because Iowa coded same-day stays with a value of 1. The appropriate edit check for consistency of reported and calculated length of stay could not be performed.

Massachusetts

The supplied length of stay was not used when LOS could not be calculated because Massachusetts:

- coded same-day stays with the value 1 and
- subtracted days of absence.

The appropriate edit check for consistency of reported and calculated length of stay could not be performed.

New York

LOS could not be calculated because New York did not report full admission and discharge dates. During HCUP processing, only the reported length of stay could be used to assign LOS.

Beginning in 1993, New York calculated the reported length of stay as the difference between the discharge and admission dates, minus leave of absence days. Both the New York reported length of stay and the leave of absence days were supplied to HCUP. To be consistent with the coding used by HCUP, the leave of absence days were added back into the reported length of stay before LOS was assigned.

Oregon

In 1993, the reported length of stay was assigned to LOS if dates were not available. However, the coding of same day stays varies: some Oregon hospitals report discharges on the day of admission as one day stays (LOS=1), in addition to reporting same day stays as zero days (LOS=0).

Beginning in 1994, the reported length of stay was not used when LOS could not be calculated from dates because Oregon coded all same-day stays as one day (LOS=1). The appropriate edit check for consistency of reported and calculated length of stay could not be performed.

South Carolina

The reported length of stay was not used when LOS could not be calculated because South Carolina coded same-day stays with a value of 1. The appropriate edit check for consistency of reported and calculated length of stay could not be performed.

Washington

The reported length of stay was not used when LOS could not be calculated because Washington:

- coded same-day stays with the value 1 and
- subtracted days of absence.

The appropriate edit check for consistency of reported and calculated length of stay could not be performed.

Wisconsin

For 1988-1994, the reported length of stay was not used when LOS could not be calculated because Wisconsin:

- subtracted leave days and
- coded length of stay greater than 999 days as 999 days.

Beginning with 1995, length of stay was not supplied. LOS was calculated.

In all years, the appropriate edit check for consistency of reported and calculated length of stay could not be performed.

LOS_X Length of stay (uncleaned)

Variable	Description	Value	Value Description
LOS_X	Length of stay, uncleaned	± 32,767 . .A .B	Days Missing Invalid (non-numeric) Unavailable from Source

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

Length of stay (LOS_X) is calculated by subtracting the admission date (ADATE) from the discharge date (DDATE). Same-day stays are therefore coded as 0. Leave days are not subtracted. Before edit checks are performed, LOS and LOS_X have the same value. If LOS is set to inconsistent (.C), the value of LOS_X is retained. LOS_X may contain negative or unjustified large values.

LOS_X is not equal to the calculated value in the following cases:

- LOS_X is set to the supplied length of stay if the length of stay cannot be calculated (ADATE and/or DDATE is missing or invalid). Note: If the supplied length of stay codes same-day stays as 1 or subtracts leave days, then the supplied length of stay is NOT used.

- LOS_X is missing (.) if the length of stay cannot be calculated and the supplied length of stay is missing.

- LOS_X is invalid (.A) if

    - it is out-of-range during HCUP processing (LOS_X < -32,767 or LOS > 32,767) or
    - the length of stay cannot be calculated and the supplied length of stay is non-numeric.

- LOS_X is unavailable from data source (.B) if the data source does not supply either

    - admission date (ADATE) and discharge date (DDATE), or
    - length of stay.

An invalid calculated LOS_X is not replaced by the supplied length of stay.

All States

Length of stay, uncleaned,(LOS_X) is calculated from the admission date (ADATE) and discharge date (DDATE) before these dates are masked. To ensure the confidentiality of patients, the day portion of the dates stored in ADATE and DDATE are overwritten with “01" during the creation of

the Publicly Released SID. The month and year portion of these dates remains unchanged.

Arizona

For 1989-1994, the reported length of stay was not used when LOS_X could not be calculated because Arizona coded same-day stays with a value of 1 and subtracted days of absence from LOS_X.

Beginning in 1995, the source reports same-day stays as zero days. The supplied length of stay was used to assign LOS_X when the length of stay could not be calculated from dates.

Colorado

The reported length of stay was not used when length of stay could not be calculated because Colorado:

- coded same-day stays with the value 1 and
- subtracted days of absence.

Florida

Beginning in 1997, the coding of LOS and LOS_X is inconsistent with the coding of length of stay in other states. Florida provided the reported length of stay but not the admission and discharge date necessary for calculating LOS_X. Florida codes same-day stays as LOS_X=1; the HCUP standard coding of same-day stays is LOS_X=0. Usually 2% of a states' discharges are same-day stays.

Prior to 1997, the supplied length of stay was not used when length of stay could not be calculated because Florida:

- coded same-day stays with the value 1 and
- subtracted days of absence.

Iowa

The reported length of stay was not used when length of stay could not be calculated because Iowa coded same-day stays with a value of 1.

Massachusetts

The reported length of stay was not used when length of stay could not be calculated because Massachusetts:

- coded same-day stays with the value 1 and
- subtracted days of absence.

New York

LOS_X could not be calculated because New York did not report full admission and discharge dates. During HCUP processing, only the reported length of stay could be used to assign LOS_X.

Beginning in 1993, New York calculated the reported length of stay as the difference between the discharge and admission dates, minus leave of absence days. Both the New York reported length of stay and the leave of absence days were supplied to HCUP. To be consistent with the coding used by HCUP, the leave of absence days were added back into the reported length of stay before LOS_X was assigned.

Oregon

For 1993, the reported length of stay was assigned to LOS_X if dates were not available. However, the coding of same day stays varies: some Oregon hospitals report discharges on the day of admission as one day stays (LOS_X=1), in addition to reporting same day stays as zero days (LOS_X=0).

Beginning in 1994, the reported length of stay was not used when length of stay could not be calculated from dates because Oregon coded all same-day stays as one day (LOS_X=1).

South Carolina

The reported length of stay was not used when LOS_X could not be calculated because South Carolina coded same-day stays with a value of 1.

Washington

The reported length of stay was not used when length of stay could not be calculated because Washington:

- coded same-day stays with the value 1 and
- subtracted days of absence.

Wisconsin

For 1988-1994, the reported length of stay was not used when length of stay could not be calculated because Wisconsin:

- subtracted leave days and
- coded length of stay greater than 999 days as 999 days.

Beginning with 1995, length of stay was not supplied. LOS_X was calculated.

MDC MDC in effect on discharge date

Variable	Description	Value	Value Description
MDC	MDC in use on discharge date	nn	MDC

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

This is the Major Diagnostic Category (MDC) appropriate for the date of discharge.

MDC is assigned by the HCFA DRG grouper during HCUP processing. Refer to the variable notes for DRG for complete details.

Labels for the MDCs are provided as an ASCII file in *SID Tools*.

California

One discharge in 1991 with an invalid principal diagnosis code (DXV1=1) and at least one non-missing secondary diagnosis code (DX2, etc.) had the incorrect DRG and MDC assigned because of a error in HCUP processing. The DRG should have been 470; and the MDC should have been equal to 0.

No other years are affected.

Massachusetts

Some 1989-1990 discharges with a missing principal diagnosis code (DX1=" ") and at least one non-missing secondary diagnosis code (DX2, etc.) have the incorrect DRG and MDC assigned because of an error in HCUP processing. The DRG should be 470; and the MDC should be equal to 0. The following number of records are affected:

- 1 record in 1989 and
- 1 record in 1990.

No other years are affected.

Some 1988-1991 discharges with an invalid principal diagnosis code (DXV1=1) and at least one non-missing secondary diagnosis code (DX2, etc.) have the incorrect DRG and MDC assigned because of an error in HCUP processing. The DRG should be 470; and the MDC should be equal to 0. The following number of records are affected:

- for 1988, 34 records;

- for 1989, 30 record;
- for 1990, 44 records; and
- for 1991, 33 records.

Beginning with 1992 discharges, DRG and MDC were processed correctly.

Washington

Some 1988-1992 discharges with an invalid principal diagnosis code (DXV1 = 1) and at least one non-missing secondary diagnosis code (DX2, etc.) have the incorrect DRG and MDC assigned because of an error in HCUP processing. The DRG should be 470; and the MDC should be equal to 0. The following number of records are affected:

- for 1988, 184 records;
- for 1989, 68 records;
- for 1990, 13 records;
- for 1991, 1 record; and
- for 1992, 1 record.

Beginning with 1993 discharges, DRG and MDC were processed correctly.

Wisconsin

According to source documentation, the principal and secondary procedures for one hospital (DSHOSPID="056" and HOSPID=55155) are incorrect in the fourth quarter of 1997. System problems at the hospital caused the last procedure coded on the medical record to be stored as the principal procedure. No secondary procedures were recorded. This affects the DRG, DRG10, MDC, and MDC10 assignment.

Some 1989-1992 discharges with an invalid principal diagnosis code (DXV1=1) and at least one non-missing secondary diagnosis code (DX2, etc.) have the incorrect DRG and MDC assigned because of an error in HCUP processing. The DRG should be 470; and the MDC should be equal to 0. The following number of records are affected:

- for 1989, 23 records;
- for 1990, 4 records;
- for 1991, 1 record; and
- for 1992, 10 records.

Beginning with 1993 discharges, DRG and MDC were processed correctly.

MDC10 MDC, Version 10

Variable	Description	Value	Value Description
MDC10	MDC, Version 10	nn	MDC

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

This is the Version 10 Major Diagnostic Category.

MDC10 is assigned by the HCFA DRG grouper during HCUP processing. Refer to the variable notes for DRG10 for complete details.

Labels for the MDCs are provided as an ASCII file in *SID Tools*.

California

One discharge in 1991 with an invalid principal diagnosis code (DXV1=1) and at least one non-missing secondary diagnosis code (DX2, etc.) had the incorrect DRG10 and MDC10 assigned because of a error in HCUP processing. The DRG10 should have been 470; and the MDC10 should have been equal to 0.

No other years are affected.

Massachusetts

Some 1989-1990 discharges with a missing principal diagnosis code (DX1=" ") and at least one non-missing secondary diagnosis code (DX2, etc.) have the incorrect DRG10 and MDC10 assigned because of an error in HCUP processing. The DRG10 should be 470; and the MDC10 should be equal to 0. The following number of records are affected:

- 1 record in 1989 and
- 1 record in 1990.

No other years are affected.

Some 1988-1991 discharges with an invalid principal diagnosis code (DXV1=1) and at least one non-missing secondary diagnosis code (DX2, etc.) have the incorrect DRG10 and MDC10 assigned because of an error in HCUP processing. The DRG10 should be 470; and the MDC10 should be equal to 0. The following number of records are affected:

- for 1988, 34 records;
- for 1989, 30 record;

- for 1990, 44 records; and
- for 1991, 33 records.

Beginning with 1992 discharges, DRG10 and MDC10 were processed correctly.

Washington

Some 1988-1992 discharges with an invalid principal diagnosis code (DXV1 = 1) and at least one non-missing secondary diagnosis code (DX2, etc.) have the incorrect DRG and MDC assigned because of an error in HCUP processing. The DRG should be 470; and the MDC should be equal to 0. The following number of records are affected:

- for 1988, 184 records;
- for 1989, 68 records;
- for 1990, 13 records;
- for 1991, 1 record; and
- for 1992, 1 record.

Beginning with 1993 discharges,DRG10 and MDC10 were processed correctly.

Wisconsin

According to source documentation, the principal and secondary procedures for one hospital (DSHOSPID="056" and HOSPID=55155) are incorrect in the fourth quarter of 1997. System problems at the hospital caused the last procedure coded on the medical record to be stored as the principal procedure. No secondary procedures were recorded. This affects the DRG, DRG10, MDC, and MDC10 assignment.

Some 1989-1992 discharges with an invalid principal diagnosis code (DXV1=1) and at least one non-missing secondary diagnosis code (DX2, etc.) have the incorrect DRG10 and MDC10 assigned because of an error in HCUP processing. The DRG10 should be 470; and the MDC10 should be equal to 0. The following number of records are affected:

- for 1989, 23 records;
- for 1990, 4 records;
- for 1991, 1 record; and
- for 1992, 10 records.

Beginning with 1993 discharges, DRG10 and MDC10 were processed correctly.

MDID_S Attending physician number (synthetic)

Variable	Description	Value	Value Description
MDID_S	Attending physician number (synthetic)	16(a) blank	Synthetic Physician ID Missing

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

MDID_S contains a fixed-key (one-to-one) encryption of the supplied attending physician number (MDID), according to the following rules:

- All alphanumeric digits are used in the encryption.
- All symbols such as ".,:;'*@" are retained in the encrypted value, but not in the same location.
- Unprintable characters in the original value are also retained.
- Leading zeros are encrypted so that the two original physician identifiers "000A0" and "A0" are distinctly different.
- When the original attending physician and primary surgeon identifiers are the same, the synthetic identifiers, MDID_S and SURGID_S, are the same.

Except in those data sources where physician license numbers are supplied, it is not known whether the physician identifier MDID_S refers to individual physicians or to groups. If the attending physician numbers supplied by the data source are not restricted to license numbers, the state-specific note includes available information about reporting practices, including whether MDID_S refers to individual physicians or to groups.

Arizona

The attending physician identification number (MDID_S) may not accurately track physicians across hospitals for the following reasons:

- Some hospitals assign their own internal attending physician identification numbers rather than using the license numbers issued by the licensing agency of the physician or other health care practitioner. Information was not available about the prevalence of this practice.

- Some hospitals use one attending physician identification number for several physicians that are part of the same physician practice group. Information was not available about the prevalence of this practice.

The attending physician identification number includes license numbers from the following board of examiners: Medical, Osteopathic, Podiatrists, and Nurses. In addition, Arizona accepts licensing numbers from other health practitioner licensing boards, but these boards are

unspecified.

Colorado

The attending physician identification number (MDID_S) may not accurately track physicians across hospitals. The state encourages hospitals to use the Professional State License Number as an identifier, but some hospitals continue to use their own internal identification number. Information was not available from the data source about the prevalence of this practice.

Some hospitals may use one license number for all physicians in order to protect physician confidentiality. Information was not available from the data source about the prevalence of this practice.

Florida

Florida reports state license numbers as physician identifiers. Source documentation includes an extensive description of the allowable values in the field.

Iowa

Iowa reports Universal Physician Identification Numbers (UPINs) as attending physician identification numbers.

Maryland

Maryland reports a state license number assigned by the Medical Chirurgical Faculty of Maryland (MED CHI) as physician identifiers. Source documentation describes strict assignment and verification rules for this field.

New Jersey

The coding of attending physician identification number (MDID_S) varies across years:

Year	Physician Identifier
1988-93	New Jersey state license numbers
1994-95	Universal Physician Identification Numbers (UPINs)
Beginning in 1996	New Jersey state license numbers.

New York

New York reports state license numbers as physician identifiers. Source documentation indicates that if the attending physician did not possess a valid New York state license number, the license

number of the Chief of Service should have been reported.

New York does not limit this field to physicians; dentists, podiatrists, psychologists, nurse/midwifes, and other licensed health care professional may be included. It is impossible to identify the different types of providers in the HCUP data.

Washington

The Washington physician identifiers may not accurately track physicians across hospitals. Washington collects several different types of physician identifiers, depending on the type of identifier provided by the hospitals. Hospitals provide Medicaid, Universal Physician Identification Numbers (UPINs), and DOH/HPQAD license numbers as physician identifiers.

MDSPEC Physician specialty

Variable	Description	Value	Value Description
MDSPEC	Attending physician speciality	n(a) blank	Physician Speciality Missing

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

MDSPEC uses source-specific coding.

New Jersey

The length of MDSPEC is character 1.

In New Jersey, MDSPEC is coded as follows:

Source Value	Description
1	Medical
2	Surgical
3	Obstetric
4	Gynecology
5	Pediatric
6	Newborn Pediatric
7	Psychiatric
8	Orthopedic
9	Dental

South Carolina

The length of MDSPEC is character 3.

South Carolina reports physician specialty as the area in which the physician spends the most hours per week, as reported at license renewal. If the physician does not report hours, South Carolina assigns physician specialty as the first practice type reported by the physician.

Physicians report their specialties to South Carolina using the categories and abbreviations in the "source-specific descriptions" column of the following table. South Carolina assigns them to three-character codes and reports the data in that format. During HCUP processing, the three-character codes supplied by the state were assigned to MDSPEC.

In South Carolina, MDSPEC is coded as follows. Any other codes are undefined.

Source Value	Description
0AA	Pediatric Endocrinology (PDE)
0AB	Internal Medicine/Diagnostic Laboratory Immunology (ILI)
0AC	Internal Medicine, Geriatrics (IMG)
0AD	Neurological Surgery, Critical Care (NCC)
0AE	Pathology, Neuropathology (NP)
0AF	Neurology, Pediatric Surgery (NSP)
0AG	Orthopedic Surgery, Adult Reconstructive Orthopedics (OAR)
0AH	Obstetrics & Gynecology/Critical Care Medicine (OCC)
0AI	Orthopedic Surgery, Musculoskeletal Oncology (OMO)
0AJ	Orthopedic Surgery, Pediatric Orthopedics (OP)
0AK	Orthopedic Surgery, Sports Medicine (OSM)
0AL	Orthopedic Surgery, Trauma (OTR)
0AM	Pathology, Chemical (PCH)
0AN	Pathology, Cytopathology (PCP)
0AO	Pediatric Gastroenterology (PG) (code is zero-A-oh)
0AP	Pathology, Immunopathology (PIP)
0AQ	Pediatrics/Diagnostic Laboratory Immunology (PLI)
0AT	Undersea Medicine (UM)
0AU	Radiology, Vascular and Interventional (VIR)
0AV	Addiction Medicine (ADM)
0BB	Pathology, Radioisotopic (RIP)
0BJ	Pediatric Otolaryngology
0BL	Pain Medicine
0BM	Pediatric Ophthalmology
0BS	Obstetrics
0CB	Cardiothoracic Surgery
0CC	Surgery, Vascular (VS)
0CE	Cardiac Electrophysiology
0CJ	Pediatric Infectious Disease
0DD	Neonatal Medicine (NEO)
0EE	Pediatric Pulmonology (PDP)
0FF	Radiation Oncology (RO)
0HH	Pediatric Emergency Medicine (PEM)
0II	Medical Genetics (MG)
0JJ	Psychiatry, Geriatric (PYG)
0KK	Orthopedic Surgery, Spine Surgery (OSS)
0LL	Allergy & Immunology/Diagnostic Laboratory Immunology (ALI)
0MM	Anesthesiology, Pain Management (APM)
0OO	Pathology, Blood Banking (BBK) (code is zero-oh-oh)
0PP	Anesthesiology, Critical Care (CCA)
0QQ	Pediatric Critical Care (CCP)
0RR	Surgery, Critical Care (CCS)
0SS	Neurology, Clinical Neurophysiology (CN)
0TT	Dermatological Immunology/Diagnostic Laboratory Immunology (DDL)
0UU	Family Practice, Geriatric Medicine (FPG)
0VV	Family Practice, Sports Medicine (FSM)
0WW	Pathology, Hematology (HMP)
0XX	Orthopedic Surgery, Hand Surgery (HSO)
0YY	Plastic Surgery, Hand Surgery (HSP)

0ZZ Internal Medicine Cardiac Electrophysiology (ICE)
001 Aerospace Medicine (AM)
002 Allergy & Immunology (AI)
003 Anesthesiology (AN)
005 Cardiovascular Disease (CD)
006 Dermatology (D)
007 Diabetes (DIA)
008 Emergency Medicine (EM)
009 Endocrinology (END)
010 Family Practice (FP, FPP)
011 Gastroenterology (GE)
012 General Practice (GP), Dental Health Program (DHP), Intern
013 General Preventative Medicine (GPM)
014 Geriatrics (GER)
015 Gynecology (GYN, G)
016 Hematology (HEM)
018 Infectious Diseases (ID)
019 Internal Medicine (IM)
021 Legal Medicine (LM)
023 Nephrology (NEP)
024 Neurology (N)
025 Neurology, Child (CHN)
026 Neuropathology (NA)
027 Nuclear Medicine (NM)
028 Nutrition (NTR)
029 Obstetrics (OBS)
030 Obstetrics & Gynecology (OBG)
031 Occupational Medicine (OM)
032 Ophthalmology (OPH)
033 Otology (OT)
034 (OTL)
035 Pathology, Anatomic/Clinical (PTH)
036 Pathology, Clinical (CLP)
037 Pathology, Forensic (FOP)
038 Pediatrics (PD)
039 Pediatric Allergy (PDA)
040 Pediatric Cardiology (PDC)
041 Pharmacology, Clinical (PA)
042 Physical Medicine & Rehabilitation (PM)
043 Psychiatry (P)
044 Psychiatry, Child (CHP)
045 Psychoanalysis (PYA)
047 Public Health (PH)
048 Pulmonary Disease (PUD)
049 Radiology (R)
050 Radiology, Diagnostic (DR)
051 Radiology, Pediatric (PDR)
052 Therapeutic Radiology (TR)
053 Rheumatology (RHU)
056 Abdominal Surgery (ABS)
057 Surgery, Cardiovascular (CDS)
058 Surgery, Colon & Rectal (CRS)
059 Surgery, General (GS)
060 Surgery, Hand (HS)

061 Surgery, Head & Neck (HNS)
062 Surgery, Neurological (NS)
063 Surgery, Orthopedic (ORS)
064 Surgery, Pediatric (PDS)
065 Surgery, Plastic (PS)
066 Surgery, Thoracic (TS)
067 Surgery, Traumatic (TRS)
068 Surgery, Urological (U)
069 1993: Nuclear Radiology (NR)
1994: Nuclear Radiology (OTHER)
071 Immunology (IG)
073 Oncology Medical (ON)
074 Otolaryngology (OTO)
080 Administrative Medicine (ADM)
081 Student Health (SH)
082 Pediatric Hematology-Oncology (PHO)
083 Pediatric Nephrology (PN, PNP)
084 Neonatal-Perinatal Medicine (NPM)
085 Pathology, Anatomic (ATP)
086 Gynecological Oncology (GO, ONC)
087 Maternal & Fetal Medicine (MFM)
088 Reproductive Endocrinology (REN, RE)
089 Allergy (A)
090 Adolescent Medicine (ADL)
091 Blood Banking (BLB)
092 Critical Care Medicine (CCM)
093 Chemical Pathology (CMP)
094 Diagnostic Lab Immunology (DLI)
095 Dermatopathology (DMP)
096 Facial Plastic Surgery, Otolaryngology (FPS)
097 Immunopathology (IP)
098 Medical Microbiology (MM)
099 Nuclear Radiology (NR)
103 General Practice, Dentist (GP-DENT)
108 Oral Surgery (OS-DENT)
110 Periodontics Dentist (PERIO-DENT)

South Carolina data do not separately classify some physician specialties. No documentation was available describing which physician specialties were used for:

U.S. Air Force (AF)
Pathology, Pediatric Pathology (PP)
U.S. Navy (USN)
U.S. Army (USA)
Osteopathy (OST)
U.S. Public Health Service (PHS)

MRN_S Medical record number (synthetic)

Variable	Description	Value	Value Description
MRN_S	Synthetic medical record numbers	17(a) blank	Synthetic MRN Missing

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HCUP Uniform Coding:

MRN_S is specific to patients (persons) so that multiple admissions by the same patient to a single institution can be linked. MRN_S does not allow linkage of persons across institutions.

MRN_S should not be used for analyses without first consulting summary statistics on:

- Frequencies of the number of discharges per nonmissing MRN_S, by hospital, and
- Hospital-level counts of the number of unique nonmissing MRN_Ss, the number of discharges associated with these MRN_Ss, the ratio of these two numbers (discharges/person), and the number of discharges without a MRN_S.

MRN_S contains a fixed-key (one-to-one) encryption of the supplied medical record number (MRN), according to the following rules:

- All alphanumeric digits are used in the encryption.
- All symbols such as ".,:;'*@" are retained in the encrypted value but not in the same location.
- Unprintable characters in the original value are also retained.
- Leading zeros are retained. If a hospital codes the same medical record number inconsistently (sometimes with leading zeros and sometimes with leading blanks), the HCUP medical record numbers are different, as the following table demonstrates.

Original Value	MRN Value
"000A0"	"000A0"
" A0"	“A0"
" A0 "	"A0"

NDX Number of diagnoses on this discharge

Variable	Description	Value	Value Description
NDX	Number of diagnoses for this discharge	0 - 30	Number of diagnoses

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

NDX indicates the total number of diagnoses (valid and invalid) coded on the discharge record. In assigning NDX, the principal diagnosis is included in the count, even if it is blank, so long as there is a secondary diagnosis present (see table below).

Value	Description
0	No diagnoses coded.
1	Only the principal diagnosis (DX1) is coded. All other diagnoses are blank.
2	One secondary diagnosis (DX2) is coded. The principal diagnosis may be coded or blank.
3	The second and third diagnoses (DX2 and DX3) are coded. The principal diagnosis may be coded or blank.
etc.	

NEOMAT Neonatal and/or maternal DX and/or PR

Variable	Description	Value	Value Description
NEOMAT	Neonatal/maternal discharge	0 1 2 3	No neonatal or maternal Maternal record Neonatal record Neonatal & maternal, same record

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

NEOMAT identifies discharges with neonatal and/or maternal diagnoses and procedures. See the Technical Supplement on *Quality Control in HCUP Data Processing* for diagnosis and procedure screens.

NPR **Number of procedures on this discharge**

Variable	Description	Value	Value Description
NPR	Number of procedures for this discharge	0 - 30	Number of procedures

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

NPR indicates the total number of procedures (valid and invalid) coded on the discharge record. In assigning NPR, the principal procedure is included in the count, even if it is blank, so long as there is a secondary procedure present (see table below).

Value	Description
0	No procedures coded.
1	Only the principal procedure (PR1) is coded. All other procedures are blank.
2	One secondary procedure (PR2) is coded. The principal procedure may be coded or blank.
3	The second and third procedures (PR2 and PR3) are coded. The principal procedure may be coded or blank.
etc.	

PAY1 Primary expected payer, uniform

Variable	Description	Value	Value Description
PAY1	Expected primary payer, uniform	1 2 3 4 5 6 . .A .B	Medicare Medicaid Private Insurance including HMO Self-pay No Charge Other Missing Invalid Unavailable from Source

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

In general, PAY1 is recoded from PAY1_N (non-uniform expected primary payer) according to the following rules:

PAY1		PAY1_N	
Description	Value	Description	Value
Medicare	1	Medicare	1
Medicaid	2	Medicaid	2
Private Insurance, including HMO	3	Blue Cross, Blue Cross PPO	3
		Commercial, PPO	4
		Alternative delivery systems (HMO, PHP, etc.)	5
Self-pay	4	Self-pay	6
No Charge	5	No Charge	7
Other	6	Title V	8
		Worker's Compensation	9
		CHAMPUS/CHAMPVA	10
		Other Government	11
		Other	12

PAY1		PAY1_N	
Description	Value	Description	Value
Missing	(.)	Missing	(.)
Invalid	(.A)	Invalid	(.A)
Unavailable from source	(.B)	Unavailable from source	(.B)

Arizona

Arizona's coding of expected primary payer changes across years. The following table describes what payer types were reported by Arizona and how they were mapped into the HCUP payer categories.

HCUP Payer Category (PAY1)	1989-1994 Arizona Payers	Starting in 1995 Arizona Payers
Medicare (1)	"Medicare"	"Medicare" and "Medicare Risk"
Medicaid (2)	"AHCCCS/Medicaid"	"AHCCCS/Medicaid" and "AHCCCS Health Care Group"
Private Insurance, PPO (3)	"Commercial" and "HMO/PHP/Blue Cross"	"Commercial (Indemnity)," "PPO," and "HMO/Prepaid Health Plans/Blue Cross"
Self-pay (4)	N/A	"Self-Pay"
No Charge (5)	N/A	"No Charge"
Other (6)	"Other (Self, unknown, charity, etc.)"	"Worker's Compensation," "CHAMPUS/MEDEXCEL" "Children's Rehabilitation Services," "Indian Health Services," "Foreign National," and "Other"

The state data report completed by Arizona for their 1989-1994 data indicated that hospitals do not code payer sources consistently statewide. For example,

- Some hospitals code Medicare Risk patients under the Arizona category "HMO/PPO/Blue Cross," and other hospitals code them under "Medicare."

- Some hospitals list all Indemnity cases under the Arizona category "Commercial," while others use "HMO/PPO/Blue Cross."

Information was not available about the prevalence of this practice or the occurrence after 1994.

California

The source reports "Medicare HMO payers" as "Medicare." These payers are included in the HCUP uniform category "Medicare" (PAY1 = 1).

The source reports "Medi-Cal HMO payers" as "Medi-Cal." These payers are included in the HCUP uniform category "Medicaid" (PAY1 = 2).

Colorado

Colorado redefined payer codes and categories in 1993. Several of the HCUP payer recodes are affected:

HMO/PPO

1988-1992	The source reports only one distinct HMO/PPO payer category (PAY1 = 3). The source documentation does not indicate whether HMO services paid for by Medicare, Medicaid, and other payers ("other liability," no fault auto insurance, and home casualty insurance) are included in the source data as HMO/PPO.
Beginning 1993	The source reports separate categories for commercial HMO/PPO (PAY1 = 3), Medicare HMO (PAY1 = 1), Medicaid HMO (PAY1 = 2), and HMO/PPO service provided by other payers "Other Liability, No Fault Auto, and Home Casualty Insurance" (PAY1 = 3).

CHAMPUS / CHAMPVA

1988-1992	The source does not separately classify CHAMPUS/CHAMPVA. The documentation supplied by the data source does not indicate how these payers are coded.
Beginning 1993	The data source reports CHAMPUS/CHAMPVA as a distinct category (PAY1 = 6).

Colorado Medically Indigent Program

1988-1992	The source does not separately classify Colorado Medically Indigent Program. The documentation supplied by the data source does not indicate how these payers are reported.
Beginning 1993	The data source reports Colorado Medically Indigent Program as a distinct category, which is recoded to the HCUP category "Other" (PAY1 = 6).

Florida

In addition to the usual categories coded under Medicare (PAY1 = 1), a pay source of "Medicare HMO" is included.

In addition to the usual categories coded under Medicaid (PAY1 = 2), a pay source of "Medicaid HMO" is included.

Starting in 1992, the category of self-pay (PAY1 = 4) includes self-pay, charity, and underinsured. Prior to 1992, these payers were categorized under Other (PAY1 = 6), because Florida did not separately identify them.

Iowa

Iowa does not separately classify No Charge (PAY1 = 5). No documentation was available about which payer type(s) were used for No charge.

Some hospitals assign the same payer source to all discharges. Examination of the data indicates that these sources are either Medicare (PAY1 = 1), Private Insurance (PAY1 = 3), or both (PAY1=1 and PAY1=3). Before using PAY1 for analyses, consult hospital-specific summary statistics.

Maryland

The HCUP category "Medicare" (PAY1 = 1) includes the source code "Medicare HMO."

The HCUP category "Medicaid" (PAY1 = 2) includes the source codes "Medicaid State Only (MSO)" and "Medicaid HMO."

In addition to the usual categories coded under the HCUP category "Other" (PAY1 = 6), a pay source of "Donor" is included.

Massachusetts

Beginning in 1993, quarter 4, Massachusetts reports separate managed care categories:

Source Payer	HCUP Payer	PAY1
Medicare Managed Care	Medicare	1
Medicaid Managed Care	Medicaid	2
Blue Cross Managed Care	Private Insurance Including HMO	3
Commercial Managed Care	Private Insurance Including HMO	3

Other Non-Managed Care	Other	6

Beginning in 1996, "PPO and Other Managed Care not listed elsewhere" was recoded into the uniform category "Private Insurance including HMO" (PAY1 = 3). From 1993 to 1995, "PPO and Other Managed Care not listed elsewhere" was recoded into the uniform category "Other" (PAY1 = 6).

New Jersey

Unusual pay sources were recoded as follows:

Pay source	Recoded to HCUP uniform value
"No Fault"	Private Insurance, PPO (PAY1 = 3)
"Personnel Health Plan"	Other (PAY1 = 6)
"Indigent"	1988-1992: Other (PAY1 = 6) From 1993: Self-Pay (PAY1 = 4)

The source pay category "Indigent" was incorrectly mapped to "Other" (PAY1 = 6) during HCUP processing of 1988-1992 data.

Misreported Medicare Payers

Beginning in April 1994 and continuing through 1995, Memorial Hospital of Burlington County (DSHOSPID = 00570) incorrectly reported some Medicare Payers as other payer groups:

1994	1995	Reported As
846	959	Medicaid
20	18	Maternal & Child Health
1	5	CHAMPUS

New York

The source categories "No Fault," "Self Insured," and "Self Administered Plan" are included in the HCUP category "Private Insurance" (PAY1 = 3).

Beginning in 1996, New York separately reported pay categories for "Corrections - Federal", "Corrections - State", and "Corrections - Local." All of these source values were recoded to the HCUP uniform category "Other" (PAY1 = 6).

Oregon

For 1993-1994, Oregon did not separately classify "No Charge" (PAY1 = 5). The source

documentation supplied by Oregon did not indicate which source categories were used for "No Charge."

Beginning in 1995, the source reported a category "Medically Indigent/Free/Research." This is recoded to the HCUP uniform category "No Charge" (PAY1 = 5).

South Carolina

South Carolina does not separately classify "No Charge" (PAY1 = 5). South Carolina reports a government program for indigent patients that is recoded to the HCUP category Other (PAY1 = 6).

In 1995, the source added a category for HMO patients. These discharges were recoded in the HCUP category "Blue Cross/Commercial/HMO" (PAY1 = 3).

Washington

Washington does not separately classify Blue Cross payers. The source category "Health Care Service Contractors" includes a mix of Blue Cross, County Medical Bureaus, Washington Physicians Service, and other commercial payers.

In all years except 1993, "Health Care Service Contractors" was recoded into the uniform category "Private Insurance including HMO" (PAY1 = 3). Due to an error in HCUP processing, "Health Care Service Contractors" was recoded into the uniform category "Other" (PAY1 = 6) in 1993.

Wisconsin

Wisconsin does not separately classify No Charge (PAY1 = 5). No documentation was available about which payer type(s) were used for No charge.

PAY1_N Primary expected payer, nonuniform

Variable	Description	Value	Value Description
PAY1_N	Expected primary payer, nonuniform	1	Medicare
		2	Medicaid
		3	Blue Cross, Blue Cross PPO
		4	Commercial, PPO
		5	Alt. Delivery Sys (HMO,PHP,etc.)
		6	Self-pay
		7	No Charge
		8	Title V
		9	Worker's Compensation
		10	CHAMPUS, CHAMPVA
		11	Other Government
		12	Other
		.	Missing
		.A	Invalid
		.B	Unavailable from Source

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

PAY1_N (where _N indicates non-uniform) preserves much of the original payer detail from the various data sources. However, some categories of PAY1_N are not available from some sources because not all sources had the same level of detail available.

Arizona

Arizona's coding of expected primary payer changes across years. For 1989-1994, PAY1_N is missing (.) for all discharges even though PAY1 is coded. This is because Arizona payer codes lacked the detail necessary to map them accurately to the nonuniform PAY1_N codes.

Beginning in 1995, Arizona reported enough detail to assign the nonuniform PAY1_N codes. Unusual pay sources were recoded as follows:

Pay source	Recoded to HCUP uniform value
"Medicare Risk"	Medicare (PAY1_N = 1)
"AHCCCS Health Care Group"	Medicaid (PAY1_N = 2)
MEDEXCEL	CHAMPUS/CHAMPVA (PAY1_N = 10)
"Children's Rehabilitation Services"	Other Government (PAY1_N = 11)
"Indian Health Services"	Other Government (PAY1_N = 11)
"Foreign National"	Other (PAY1_N = 12)

The Arizona category "HMO/Prepaid Health Plans/Blue Cross" was recoded into the HCUP category "Alternative Delivery Systems, HMO" (PAY1_N = 5), but it represents a mix of plans that are usually divided into:

– Blue Cross, Blue Cross PPO (PAY1_N = 3),
  Commercial, PPO (PAY1_N = 4), and
– Alt. delivery systems, HMO (PAY1_N = 5).

Arizona does not separately classify Title V (PAY1_N = 8). No documentation was available about which payer type(s) were used for Title V.

California

HMO Payers

The source reports "Medicare HMO payers" as "Medicare." These payers are included in the HCUP uniform category "Medicare" (PAY1_N = 1).

The source reports "Medi-Cal HMO payers" as "Medi-Cal." These payers are included in the HCUP uniform category "Medicaid" (PAY1_N = 2).

The source reports "Blue Cross/Blue Shield HMO payers" as "Blue Cross/Blue Shield." These payers are included in the HCUP uniform category "Blue Cross/Blue Shield" (PAY1_N = 3).

Title V

Beginning in 1995, the source does not separately classify "Title V" (PAY1_N = 8). No documentation was available about which payer type(s) were used for Title V.

CHAMPUS/CHAMPVA

Prior to 1995, California did not separately classify CHAMPUS/CHAMPVA payers. No documentation was available about which payer type(s) were used for CHAMPUS/CHAMPVA.

Beginning in 1995, the source reports CHAMPUS/CHAMPVA as a separate category. These records are included in the uniform category "CHAMPUS/CHAMPVA" (PAY1_N = 10).

Medically Indigent Services

A pay source of "Medically Indigent Services" is included in the HCUP uniform category "Other Government" (PAY1_N = 11).

Colorado

Colorado redefined payer codes and categories in 1993. Several of the HCUP payer recodes are affected:

HMO / PPO

1988-1992	The source reports only one distinct HMO/PPO payer category (PAY1_N = 5). The source documentation does not indicate whether HMO services paid for by Medicare, Medicaid, and other payers ("other liability," no fault auto insurance, and home casualty insurance) are included in the source data as HMO/PPO.
Beginning 1993	The source reports separate categories for HMO/PPO (PAY1_N = 5), Medicare HMO (PAY1_N = 1), Medicaid HMO (PAY1_N = 2), and HMO/PPO service provided by other payers "Other Liability, No Fault Auto, and Home Casualty Insurance" (PAY1_N = 4).

CHAMPUS / CHAMPVA

1988-1992	The source does not separately classify CHAMPUS/CHAMPVA. The documentation supplied by the data source does not indicate how these payers are coded.
Beginning 1993	The data source reports CHAMPUS/CHAMPVA as a distinct category (PAY1_N = 10).

Colorado Medically Indigent Program

1988-1992	The source does not separately classify Colorado Medically Indigent Program. The documentation supplied by the data source does not indicate how these payers are reported.
Beginning 1993	The data source reports Colorado Medically Indigent Program as a distinct category, which is recoded to the HCUP category "Other Government" (PAY1_N = 11).

Title V

1988-1992	The source reports a distinct category for Title V (PAY1_N = 8).
Beginning 1993	The source reports Title V as "Other Government" (PAY1_N = 11).

Florida

Medicare
In addition to the usual categories coded under Medicare (PAY1_N = 1), a pay source of "Medicare HMO" is included.

Medicaid
In addition to the usual categories coded under Medicaid (PAY1_N = 2), a pay source of "Medicaid HMO" is included.

Blue Cross

Florida does not separately classify Blue Cross. Blue Cross payers are categorized under Commercial, PPO (PAY1_N = 4).

Self-pay, Charity, and Underinsured
From 1988-1991, the payers self-pay, charity, and underinsured were categorized under Other (PAY1_N = 12), because Florida did not separately identify them.

From 1992-1996, Florida provided one payer category for “Self-pay, Charity, and Underinsured” which was categorized under the Self-pay (PAY1_N = 6).

Beginning in 1997, "Charity" is identified by Florida with a separate source value and is recoded to "No Charge" (PAY1_N = 7). Self-pay and Underinsured continue to be categorized under Self-pay (PAY1_N = 6).

Iowa

Iowa data do not separately classify:

- Alternative Delivery System (PAY1_N = 5),
- No Charge (PAY1_N = 7),
- Title V (PAY1_N = 8), or
- CHAMPUS, CHAMPVA (PAY1_N = 10).

The documentation indicates that Alternative Delivery Systems are included in Commercial (PAY1_N = 4). Title V and CHAMPUS, CHAMPVA are included in Other Government (PAY1_N = 11). No documentation was available about which payer type(s) were used for No Charge.

Some hospitals assign the same payer source to all discharges. Examination of the data indicates that these sources are either Medicare (PAY1_N = 1), Commercial Insurance (PAY1_N = 4), or both (PAY1_N=1 and PAY1_N = 4).

Maryland

The HCUP category "Medicare" (PAY1_N = 1) includes the source code "Medicare HMO."

The HCUP category "Medicaid" (PAY1_N = 2) includes the source codes "Medicaid State Only (MSO)" and "Medicaid HMO."

In addition to the usual categories coded under the HCUP category "Other" (PAY1_N = 12), a pay source of "Donor" is included.

Maryland did not separately classify "CHAMPUS/CHAMPVA" (PAY1_N = 10). The source documentation available for Maryland did not indicate which payer type(s) were used for "CHAMPUS/CHAMPVA."

Massachusetts

For all years, Massachusetts does not separately classify Title V (PAY1_N = 8) or CHAMPUS/CHAMPVA (PAY1_N = 10). The source documentation available for Massachusetts did not indicate which payer type(s) were used for Title V or CHAMPUS/CHAMPVA.

Beginning in 1993, quarter 4, Massachusetts reports separate managed care categories:

Source Payer	HCUP Payer	PAY1_N
Medicare Managed Care	Medicare	1
Medicaid Managed Care	Medicaid	2
Blue Cross Managed Care	Blue Cross, Blue Cross PPO	3
Commercial Managed Care	Commercial, PPO	4
Other Non-Managed Care	Other	12

Beginning in 1996, "PPO and Other Managed Care not listed elsewhere" was recoded into the uniform category "Commercial, PPO" (PAY1_N = 4). From 1993 to 1995, "PPO and Other Managed Care not listed elsewhere" was recoded into the uniform category "Other" (PAY1_N = 12).

Beginning in 1997, the source code “Point of Service” was included in the HCUP uniform category “Alternative Delivery Systems” (PAY1_N = 5).

New York

New York does not separately classify Title V (PAY1_N = 8). The source documentation available for New York does not indicate which payer type(s) were used for Title V.

The source categories "No Fault," "Self Insured," and "Self Administered Plan" are included in the HCUP category "Commercial, PPO" (PAY1_N = 4).

Prior to 1996, the source category "Corrections (State, County or City)" is included in the HCUP category "Other Government" (PAY1_N = 11). Beginning in 1996, New York separately reported pay categories for "Corrections - Federal", "Corrections - State", and "Corrections - Local." All of these source values were recoded to the HCUP uniform category "Other Government" (PAY1_N = 11).

Beginning in 1993:

- The source separately classifies "Medicare HMO." This is assigned to the HCUP category "Medicare" (PAY1_N = 1).

- The source separately classifies "Medicaid HMO." This is assigned to the HCUP category "Medicaid" (PAY1_N = 2).

Oregon

Prior to 1995, Oregon did not separately classify the HCUP categories:

- "Alternative Delivery System" (PAY1_N = 5),
- "No Charge" (PAY1_N = 7),
- "TITLE V" (PAY1_N = 8), or
- "CHAMPUS, CHAMPVA" (PAY1_N = 10).

The source documentation supplied by Oregon did not indicate which source categories are used for these payers. Starting in 1995, these payers are reported as separate categories.

In 1995, two source categories for payer were added:

- the source category "Self-insured" is included in the HCUP category "Commercial insurance" (PAY1_N = 4), and
- The source category "Managed Assistance" is included in the HCUP category "Other Government" (PAY1_N = 11).

Washington

Washington does not separately classify CHAMPUS and CHAMPVA payers (PAY1_N = 10). According to the documentation available from the state, CHAMPUS and CHAMPVA are categorized as "other sponsored patients," which are included in the HCUP category "Other" (PAY1_N = 12).

Washington does not separately classify Blue Cross payers (PAY1_N = 3). The source category "Health Care Service Contractors" includes a mix of Blue Cross, County Medical Bureaus, Washington Physicians Service, and other commercial payers. This source value was recoded into the non-uniform category "Other" (PAY1_N = 12).

Wisconsin

Wisconsin does not separately classify:

- No Charge (PAY1_N = 7), or
- Title V (PAY1_N = 8).

No documentation was available about which payer type(s) were used for Title V and No charge.

PAY1_X Primary expected payer (from data source)

Variable	Description	Value	Value Description
PAY1_X	Expected primary payer, as received from data source	n(a)	Pay Code

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

The values included in this variable are an exact copy of the values read from the supplied data. For a description of the values, see the Technical Supplement on *Source Definition of Payer Codes*.

Arizona

The length of PAY1_X is character 2.

California

The length of PAY1_X is character 2.

Colorado

The length of PAY1_X is character 2.

Florida

The length of PAY1_X is character 1.

Iowa

The length of PAY1_X is character 2.

Maryland

The length of PAY1_X is character 2.

Massachusetts

The length of PAY1_X is character 1.

New Jersey

The length of PAY1_X is character 3.

New York

The length of PAY1_X is character 2.

Oregon

In 1993-1994, the length of PAY1_X is character 2.
In 1995, the length of PAY1_X is character 1.
In 1996, the length of PAY1_X is character 2.
In 1997, the length of PAY1_X is character 1.

South Carolina

The length of PAY1_X is character 2.

Washington

The length of PAY1_X is character 3.

Wisconsin

The length of PAY1_X is character 5. Wisconsin reports the expected primary payer as two variables, a payer identifier (3 characters) and a payer category (2 characters). During HCUP processing, these variables are concatenated to create the HCUP expected primary payer (PAY1_X= payer identifier | payer category).

For 1989-1993 processing, the separate 3 digit payer identifiers that represent separate Blue Cross plans were collapsed into a single value ("BLU") before PAY1_X was assigned. The recoded value "BLU" was assigned to PAY1_X as the first three digits of PAY1_X instead of the original numeric codes. Beginning with 1994 processing, the original numeric values for separate Blue Cross payers are assigned to PAY1_X.

PAY2 Secondary expected payer, uniform

Variable	Description	Value	Value Description
PAY2	Expected Secondary payer, uniform	1 2 3 4 5 6 . .A .B .C	Medicare Medicaid Private Insurance including HMO Self-pay No Charge Other Missing Invalid Unavailable from Source Inconsistent: ED951, ED952

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

In general, PAY2 is recoded from PAY2_N (non-uniform expected secondary payer) according to the following rules:

PAY2		PAY2_N	
Description	Value	Description	Value
Medicare	1	Medicare	1
Medicaid	2	Medicaid	2
Private Insurance, including HMO	3	Blue Cross, Blue Cross PPO	3
		Commercial, PPO	4
		Alternative delivery systems (HMO, PHP, etc.)	5
Self-pay	4	Self-pay	6
No Charge	5	No Charge	7
Other	6	Title V	8
		Worker's Compensation	9
		CHAMPUS/CHAMPVA	10
		Other Government	11
		Other	12
Missing	(.)	Missing	(.)

PAY2		PAY2_N	
Description	Value	Description	Value
Invalid	(.A)	Invalid	(.A)
Unavailable from source	(.B)	Unavailable from source	(.B)
Inconsistent	(.C)	Inconsistent	(.C)

If the primary pay source and the secondary pay source are the same and the source is one of the following:

- Medicare (ED951)
- Medicaid (ED951)
- CHAMPUS (ED952)
- Worker's Compensation (ED952)
- Title V (ED952),

then PAY2 is set to inconsistent (.C).

Maryland

The HCUP category "Medicare" (PAY2 = 1) includes the source code "Medicare HMO."

The HCUP category "Medicaid" (PAY2 = 2) includes the source codes "Medicaid State Only (MSO)" and "Medicaid HMO."

In addition to the usual categories coded under the HCUP category "Other" (PAY2 = 6), a pay source of "Donor" is included.

Massachusetts

For all years:

- The source payer codes for "Other or principal source covered payment in full" were included in the HCUP category "Other" (PAY2 = 6).

Beginning in 1993, quarter 4, Massachusetts reports separate managed care categories:

Source Payer	HCUP Payer	PAY2
Medicare Managed Care	Medicare	1
Medicaid Managed Care	Medicaid	2
Blue Cross Managed Care	Private Insurance Including HMO	3
Commercial Managed Care	Private Insurance Including HMO	3
Other Non-Managed Care	Other	6

Beginning in 1996, "PPO and Other Managed Care not listed elsewhere" was recoded into the uniform category "Private Insurance including HMO" (PAY2 = 3). From 1993 to 1995, "PPO and Other Managed Care not listed elsewhere" was recoded into the uniform category "Other" (PAY2 = 6).

New Jersey

Unusual pay sources were recoded as follows:

Pay source	Recoded to HCUP uniform value
"No Fault"	Private Insurance, PPO (PAY2 = 3)
"Personnel Health Plan"	Other (PAY2 = 6)
"Indigent"	1988-1992: Other (PAY2 = 6) From 1993: Self-Pay (PAY2 = 4)

The source pay category "Indigent" was incorrectly mapped to "Other" (PAY2 = 6) during HCUP processing of 1988-1992 data.

Misreported Medicare Payers

Beginning in April 1994 and continuing through 1995, Memorial Hospital of Burlington County (DSHOSPID = 00570) incorrectly reported some Medicare Payers as other payer groups:

1994	1995	Reported As
846	959	Medicaid
20	18	Maternal & Child Health
1	5	CHAMPUS

New York

The source categories "No Fault," "Self Insured," and "Self Administered Plan" are included in the HCUP category "Private Insurance" (PAY2 = 3).

Beginning in 1996, New York separately reported pay categories for "Corrections - Federal", "Corrections - State", and "Corrections - Local." All of these source values were recoded to the HCUP uniform category "Other" (PAY2 = 6).

Oregon

For 1993-1994, Oregon did not separately classify "No Charge" (PAY2 = 5). The source documentation supplied by Oregon did not indicate which source categories were used for "No Charge."

Beginning in 1995, the source included a category "Medically Indigent/Free/Research." This is recoded to the HCUP uniform category "No Charge" (PAY2 = 5).

South Carolina

South Carolina does not separately classify No Charge (PAY2 = 5). South Carolina reports a government program for indigent patients that is recoded to the HCUP category Other (PAY2 = 6).

In 1995, the source added a category for HMO patients. These discharges were recoded in the HCUP category "Blue Cross/Commercial/HMO" (PAY2 = 3).

Washington

Washington does not separately classify Blue Cross payers. The source category "Health Care Service Contractors" includes a mix of Blue Cross, County Medical Bureaus, Washington Physicians Service, and other commercial payers.

In all years except 1993, "Health Care Service Contractors" was recoded into the uniform category "Private Insurance including HMO" (PAY2 = 3). Due to an error in HCUP processing, "Health Care Service Contractors" was recoded into the uniform category "Other" (PAY2 = 6) in 1993.

Wisconsin

Wisconsin does not separately classify No Charge (PAY2 = 5). No documentation was available about which payer type(s) were used for No charge.

PAY2_N Secondary expected payer, nonuniform

Variable	Description	Value	Value Description
PAY2_N	Expected secondary payer, nonuniform	1	Medicare
		2	Medicaid
		3	Blue Cross, Blue Cross PPO
		4	Commercial, PPO
		5	Alt. Delivery Sys (HMO,PHP,etc.)
		6	Self-pay
		7	No Charge
		8	Title V
		9	Worker's Compensation
		10	CHAMPUS, CHAMPVA
		11	Other Government
		12	Other
		.	Missing
		.A	Invalid
		.B	Unavailable from Source
		.C	Inconsistent: ED951, ED952

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

PAY2_N (where _N indicates non-uniform) preserves much of the original payer detail from the various data sources. However, some categories of PAY2_N are not available from some sources because not all sources had the same level of detail available.

If the primary pay source and the secondary pay source are the same and the source is one of the following:

- Medicare (ED951)
- Medicaid (ED951)
- CHAMPUS (ED952)
- Worker's Compensation (ED952)
- Title V (ED952),

then PAY2_N is set to inconsistent (.C).

Maryland

The HCUP category "Medicare" (PAY2_N = 1) includes the source code "Medicare HMO."

The HCUP category "Medicaid" (PAY2_N = 2) includes the source codes "Medicaid State Only (MSO)" and "Medicaid HMO."

In addition to the usual categories coded under the HCUP category "Other" (PAY2_N = 12), a pay source of "Donor" is included.

Maryland did not separately classify "CHAMPUS/CHAMPVA" (PAY2_N = 10). The source documentation available for Maryland did not indicate which payer type(s) were used for "CHAMPUS/CHAMPVA."

Massachusetts

For all years:

- Massachusetts does not separately classify Title V (PAY2_N = 8) or CHAMPUS/CHAMPVA (PAY2_N = 10). The source documentation available for Massachusetts did not indicate which payer type(s) were used for Title V or CHAMPUS/CHAMPVA.

- The source payer codes for "Other or principal source covered payment in full" were included in the HCUP category "Other" (PAY2_N = 12).

Beginning in 1993, quarter 4, Massachusetts reports separate managed care categories:

Source Payer	HCUP Payer	PAY2_N
Medicare Managed Care	Medicare	1
Medicaid Managed Care	Medicaid	2
Blue Cross Managed Care	Blue Cross, Blue Cross PPO	3
Commercial Managed Care	Commercial, PPO	4
Other Non-Managed Care	Other	12

Beginning in 1996, "PPO and Other Managed Care not listed elsewhere" was recoded into the uniform category "Commercial, PPO" (PAY2_N = 4). From 1993 to 1995, "PPO and Other Managed Care not listed elsewhere" was recoded into the uniform category "Other" (PAY2_N = 12).

Beginning in the 4th quarter of 1997, the source code “Point of Service” was included in the HCUP uniform category “Alternative Delivery Systems” (PAY2_N = 5).

New Jersey

Unusual pay sources were recoded as follows:

Pay source	Recoded to HCUP uniform value
"No Fault"	Private Insurance, PPO (PAY2_N = 4)
"Personnel Health Plan"	Other (PAY2_N = 12)

"Indigent"	1988-1992: Other (PAY2_N = 11) From 1993: Self-Pay (PAY2_N = 6)

The source pay category "Indigent" was incorrectly mapped to "Other" (PAY2_N = 11) during HCUP processing of 1988-1992 data.

Misreported Medicare Payers

Beginning in April 1994 and continuing through 1995, Memorial Hospital of Burlington County (DSHOSPID = 00570) incorrectly reported some Medicare Payers as other payer groups:

1994	1995	Reported As
846	959	Medicaid
20	18	Maternal & Child Health
1	5	CHAMPUS

New York

New York does not separately classify Title V (PAY2_N = 8). The source documentation available for New York does not indicate which payer type(s) were used for Title V.

The source categories "No Fault," "Self Insured," and "Self Administered Plan" are included in the HCUP category "Commercial, PPO" (PAY2_N = 4).

Prior to 1996, the source category "Corrections (State, County or City)" is included in the HCUP category "Other Government" (PAY2_N = 11). Beginning in 1996, New York separately reported pay categories for "Corrections - Federal", "Corrections - State", and "Corrections - Local." All of these source values were recoded to the HCUP uniform category "Other Government" (PAY2_N = 11).

Beginning in 1993:

- The source separately classifies "Medicare HMO." This is assigned to the HCUP category "Medicare" (PAY2_N = 1).

- The source separately classifies "Medicaid HMO." This is assigned to the HCUP category "Medicaid" (PAY2_N = 2).

Oregon

Prior to 1995, Oregon did not separately classify the HCUP categories:

- "Alternative Delivery System" (PAY2_N = 5),
- "No Charge" (PAY2_N = 7),
- "TITLE V" (PAY2_N = 8), or
- "CHAMPUS, CHAMPVA" (PAY2_N = 10).

The source documentation supplied by Oregon did not indicate which source categories are used for these payers. Starting in 1995, these payers are reported as separate categories.

In 1995, two source categories for payer were added:

- the source category "Self-insured" is included in the HCUP category "Commercial insurance" (PAY2_N = 4), and

- The source category "Managed Assistance" is included in the HCUP category "Other Government" (PAY2_N = 11).

Washington

Washington does not separately classify CHAMPUS and CHAMPVA payers (PAY2_N = 10). According to the documentation available from the state, CHAMPUS and CHAMPVA are categorized as "other sponsored patients," which are included in the HCUP category "Other" (PAY2_N = 12).

Washington does not separately classify Blue Cross payers (PAY2_N= 3). The source category "Health Care Service Contractors" includes a mix of Blue Cross, County Medical Bureaus, Washington Physicians Service, and other commercial payers. This source value was recoded into the non-uniform category "Other" (PAY2_N = 12).

Wisconsin

Wisconsin does not separately classify:

- No Charge (PAY2_N = 7), or
- Title V (PAY2_N = 8).

No documentation was available about which payer type(s) were used for Title V and No charge.

PAY2_X Secondary expected payer (from data source)

Variable	Description	Value	Value Description
PAY2_X	Expected secondary payer, as received from data source	n(a)	Pay Code

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

The values included in this variable are an exact copy of the values read from the supplied data. For a description of the values, see Technical Supplement on *Source Definition of Payer Codes*.

Maryland

The length of PAY2_X is character 2.

Massachusetts

The length of PAY2_X is character 1.

New Jersey

The length of PAY2_X is character 3.

New York

The length of PAY2_X is character 2.

Oregon

In 1993-1994, the length of PAY2_X is character 2.
In 1995, the length of PAY2_X is character 1.
In 1996, the length of PAY2_X is character 2.
In 1997, the length of PAY2_X is character 1.

South Carolina

The length of PAY2_X is character 2.

Washington

The length of PAY2_X is character 3.

Wisconsin

The length of PAY2_X is character 5. Wisconsin reports the expected secondary payer as two variables, a payer identifier (3 characters) and a payer category (2 characters). During HCUP processing, these variables are concatenated to create the HCUP expected secondary payer (PAY2_X= payer identifier | payer category).

For 1989-1993 processing, the separate 3 digit payer identifiers that represent separate Blue Cross plans were collapsed into a single value ("BLU") before PAY2_X was assigned. The recoded value "BLU" was assigned to PAY2_X as the first three digits of PAY1_X instead of the original numeric codes. Beginning with 1994 processing, the original numeric values for separate Blue Cross payers are assigned to PAY2_X.

PAY3_X Tertiary expected payer (from data source)

Variable	Description	Value	Value Description
PAY3_X	Expected tertiary payer, as received from data source	n(a)	Pay Code

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

The values included in this variable are an exact copy of the values read from the supplied data. For a description of the values, see Technical Supplement on *Source Definition of Payer Codes*.

New Jersey

The length of PAY3_X is character 3.

New York

Beginning in 1997, New York supplied an expected tertiary payer in addition to the expected primary and secondary payer.

The length of PAY3_X is character 2.

Oregon

In 1993-1994, the length of PAY3_X is character 2.
In 1995, the length of PAY3_X is character 1.
In 1996, the length of PAY3_X is character 2.
In 1997, the length of PAY3_X is character 1.

PCCHPRn CCHPR: Procedure classification

Variable	Description	Value	Value Description
PCCHPRn	Clinical Classifications Software (CCS), formerly known as Clinical Classifications for Health Policy Research (CCHPR): Procedure classification	1 - 231 . .A	CCS Procedure Class No Procedure code Invalid Procedure code

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

Clinical Classifications Software (CCS), formerly known as Clinical Classifications for Health Policy Research (CCHPR), consists of 231 procedure categories. This system is based on ICD-9-CM codes that are valid for 1988 through 1997. All codes in the procedure section are classified.

PCCHPRn is coded as follows:

- PCCHPRn ranges from 1 to 231 if the procedure code (PRn) is valid by the HCUP criteria, which allows a six-month window (three months before and three months after) around the official ICD-9-CM coding changes (usually October 1), for anticipation of or lags in response to official ICD-9-CM coding changes.

- PCCHPRn is set to invalid (.A), if the procedure code (PRn) is invalid (PRVn = 1).

- PCCHPRn is missing (.), if there is no procedure code (PRn = " ").

PCCHPRn is retained (values 1-231) when a valid procedure is flagged as inconsistent with age or sex (PRVn = .C). For best results, use PCCHPRn only when the procedure is valid and consistent (PRVn = 0).

Labels

Labels for CCS, formerly known as CCHPR, categories are provided as an ASCII file in *SID Tools*.

Formats

Formats for CCS, formerly known as CCHPR, categories are provided in *SID Tools*.

A format is also available to map CCS codes into a few broad classes of conditions based on

ICD-9-CM chapters. These formats are also provided in *SID Tools*.

PNUM_S Person number (synthetic)

Variable	Description	Value	Value Description
PNUM_S	Synthetic person numbers	17(a) blank	Synthetic Person Number Missing

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

PNUM_S is specific to patients (persons) so that multiple admissions by the same patient can be linked within and across institutions.

PNUM_S should not be used for analyses without first consulting summary statistics on:

- Frequencies of the number of discharges and the number of different hospitals per nonmissing PNUM_S.

- State-level counts of the number of unique nonmissing PNUM_Ss, the number of discharges associated with these PNUM_Ss, the ratio of these two numbers (discharges/person), and the number of discharges without a PNUM_S.

PNUM_S contains a fixed-key (one-to-one) encryption of the supplied person number (PNUM), according to the following rules:

- All alphanumeric digits are used in the encryption.
- All symbols such as ".,:;'*@" are retained in the encrypted value but not in the same location.
- Unprintable characters in the original value are also retained.
- Leading zeros are retained. If the same person's PNUM is entered inconsistently (sometimes with leading zeros and sometimes with leading blanks), the resulting HCUP person numbers are different, as the following table demonstrates.

Original Value	PNUM Value
"000A0"	"000A0"
"A0"	"A0"
" A0 "	"A0"

Arizona

The encrypted person identifier (PNUM_S) may not accurately track patients across hospitals. Arizona accepts social security numbers, health insurance claim numbers, and certificate numbers as person identifiers. No documentation was available about the consistency of coding within and across hospitals.

Washington

More than one person may have the same value of PNUM_S. Washington derives the identifier from the first two letters of patients' first and last names as well as the date of birth. People with similar names and the same birth date may have the same identifier.

In addition, one person may have the two different values of PNUM_S across time. The state reports that before 1990 some hospitals did not follow the patient number convention and assigned this identifier based on the last two letters of patients' first and last names, rather than the first two letters. Starting in 1990, all hospitals followed the same conventions.

Beginning in 1993, Washington included the patient's century of birth as a component of the unencrypted patient identifier (PNUM). Prior to 1993, the birth century is not included as part of PNUM. Beginning with 1993 processing of HCUP data, birth century was removed from PNUM_S before encryption to allow linkage of patient discharges across years. The reported person identifier was assigned to PNUM.

PRn Procedure n

Variable	Description	Value	Value Description
PRn	Procedure	nnnn blank	Procedure code Missing

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

The original value of the principal procedure (PR1), whether blank or coded, is retained; secondary procedures are never shifted into the principal position during HCUP data processing.

Invalid and inconsistent procedures (PRn) are retained on the record. Use the validity flags (PRVn) in connection with any analysis of the procedures (PRn).

Procedures are compared to a list of ICD-9-CM codes valid for the discharge date. Anticipation of or lags in response to official ICD-9-CM coding changes are permitted for discharges occurring within six months of (three months before and three months after) the official ICD-9-CM coding changes (usually October 1). For example, the code for Bone Marrow Transplant changed from "410 " to "4100" as of October 1, 1988. Under HCUP validation procedures, "410 " is classified as valid for discharges as late as December 31, 1988, and "4100" is classified as valid for discharges as early as July 1, 1988.

Valid and invalid values are retained; null values are set to blank. The following are examples of invalid procedure codes that remain unchanged but are flagged as invalid:

- Garbage "x3yz"
- Not left-justified " nnn"
- Intermittent blanks "nn n"
- Zero filled "0000"

Invalid procedures are flagged as follows:

- The value of PRn is unchanged,
- PRVn is set to 1, and
- PCCHPRn is set to invalid (.A).

Procedures that are inconsistent with sex coded on the record (ED201-ED2nn) or the patient's age (ED501-ED5nn) are flagged as follows:

- The value of PRn is unchanged,
- PRVn is set to inconsistent (.C), and
- PCCHPRn is retained (values 1-231).

Arizona

For 1988-1992, the procedure codes provided by Arizona were right-padded with zeros (e.g., the procedure code '403 ' was supplied as '4030'). The following algorithm was used during HCUP processing to validate the procedure codes:

Check four-digit code for validity (using a six-month window for coding changes, 3 months before and 3 months after October of each year when ICD-9-CM coding changes occur).

1) If four-digit code is valid, set PR1 to the four-digit code and set PRV1 = 0.

2) If the four-digit code is invalid and fourth digit is a zero, create a three-digit code by deleting the trailing zero and re-check for validity (using six-month window for coding changes). If the three-digit code is valid, set PR1 to the three-digit code and set PRV1 = 0.

3) If both the four-digit and three-digit codes are invalid, save the original four-digit code PR1 and set the validity flag to indicate an invalid code (PRV1 = 1).

Beginning in 1993, Arizona procedure codes were not right-padded with zeros.

Arizona reported procedure codes with an explicit decimal point. The decimal point was removed during HCUP processing.

California

Shriner's hospitals do not report diagnoses, procedures or total charges.

Florida

In 1992 only, the hospitals identified below have erroneous procedure information when a patient had more than one operative episode during a stay. The first operative episode, which can be defined by one or more procedure codes, is correctly reported. The procedure codes for any subsequent operative episodes were not reported. The following hospitals, identified by the HCUP hospital identifier (HOSPID), are affected:

HOSPID

390530
390170
391000
390067
390622
390870
390060
391060
390727
390515
390034

Maryland

Maryland supplied procedure codes in a field of length 5. Only the first four characters contained in the left-justified source field were used to assign the HCUP procedure codes.

Massachusetts

Due to an error in HCUP processing, the procedure verification table for 1988-1992 incorrectly accepted some codes as valid, one year beyond the date when these codes were deleted or superseded by more detailed codes. With the three-month grace period built into the processor, these codes were mistakenly accepted for one full year beyond the year in which they became invalid.

Examination of frequencies from the HCUP Massachusetts files found a small number of records were affected. The procedures not flagged as invalid procedure codes (PRVn = 1) are:

PROC	YR
9971	88
9972	88
9974	88
9975	88
9978	88
9979	88
432	90
493	90
5996	90
8141	90
8187	90
8899	90

Beginning in 1993, procedures were validated correctly.

New Jersey

Before 1994, the procedure codes provided by the state were right-padded with zeros (e.g., the procedure code ’403’ was supplied as ’4030’). For the HCUP database the following algorithm was used to validate the procedure codes:

Check the four-digit code for validity (using a six-month window for coding changes, 3 months before and 3 months after October of each year when ICD-9-CM coding changes occur).

1) If the four-digit code is valid, set PRn to the four-digit code and set PRVn = 0.

2) If the four-digit code is invalid and the fourth digit is a zero**, create a three-digit code by deleting the trailing zero and re-check for validity (using six-month window for coding changes). If valid, set PRn to the three-digit code and set PRVn = 0.

3) If both the four-digit and the three-digit codes are invalid, save the original four-digit code

PRn and set the validity flag to indicate an invalid code (PRVn = 1).

In 1993 only
Due to an error in HCUP processing, the invalid three-digit code was saved in PRn instead of the invalid four-digit code.

** In 1993 only
An error in HCUP processing caused invalid four-digit codes that ended in non-zeros, as well as zeros, to be processed by the above algorithm. If deleting the rightmost non-zero digit created a valid code, then

- PRn was set to the stripped valid code,
- PRVn was set 0 to indicate a valid code,
- PCCHPR was set based on the stripped valid code, and
- DRG, MDC, DRG10, MDC10, NEOMAT and edit check variables ED100, ED2nn, and ED5nn may have been incorrectly assigned based on the stripped valid code.

Oregon

Oregon supplied procedure codes in a field of length 7. Only the first four characters contained the procedure code and were used to assign the HCUP procedure codes.

Washington

Washington supplied procedure codes in a field of length 5. Only the first four characters of five contained the procedure code and were used to assign the HCUP procedure code.

Wisconsin

According to source documentation, the principal and secondary procedures for one hospital (DSHOSPID="056" and HOSPID=55155) are incorrect in the fourth quarter of 1997. System problems at the hospital caused the last procedure coded on the medical record to be stored as the principal procedure. No secondary procedures were recorded. This affects the DRG, DRG10, MDC, and MDC10 assignment.

To comply with statutory requirements, Wisconsin modified diagnosis and procedure codes that explicitly referenced induced termination of pregnancy to eliminate distinctions between induced and spontaneous termination. The following codes were modified:

- Diagnoses with the first three digit of 634, 635, 636, 637, 638 were recoded to 637, while retaining the reported fourth digit,
- Procedure 6901 was changed to 6902,
- Procedure 6951 was changed to 6952,
- Procedure 6993 was changed to 6999,
- Procedure 7491 was changed to 7499,
- Procedure 750 was changed to 7599, and
- Procedures 9641-9649 were changed to 964 (which would be flagged as invalid, PRV=1).

PRDATEn Date of procedure n

Variable	Description	Value	Value Description
PRDATEn	Date of procedure	YYMMDD . .A .B .C	Date of Procedure Missing Invalid Unavailable from Source Inconsistent: ED7nn, ED8nn

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

Date of procedure performed (PRDATE) is assigned a valid nonmissing date, with the following exceptions:

- If a data source does not supply procedure year, month, and day, then PRDATE = unavailable from the source (.B).

- If a procedure date is supplied by the data source, and one or more of the components of the procedure date (year, month, day) is

  Blank or a documented missing value, PRDATE = missing (.).

  OR

  Non-numeric or out of range (year NE 00-99, month NE 1-12, day NE 1-31), PRDATE = invalid (.A).

- If the procedure day is inconsistent with the month (e.g., February 30), then PRDATE = invalid (.A).

Some sources do not require procedure dates for minor or diagnostic procedures which are considered UHDDS class 3 and class 4 procedures. The UHDDS system grouped ICD-9-CM procedure codes into four classes differentiated by impact on either the well-being of the patient or on the health care system. The criteria used to classify procedures included procedural risk, anesthetic risk, and the need for highly trained personnel, special facilities or special equipment. The classes are:

- Class 1: Surgical
- Class 2: Significant procedure (date required)
- Class 3: Significant procedure (date not required)
- Class 4: Minor procedures not normally coded on inpatient data.

PRDATE is shifted with the procedure codes when the procedure vector is packed. If there is a procedure date without a matching procedure, an edit-check variable (ED701-ED7nn) is set and the value of PRDATE is set to inconsistent (.C).

All States

To ensure the confidentiality of patients, the day portion of the date stored in PRDATEn is overwritten with “01" during the creation of the Publicly Released SID. The month and year portion of the date remains unchanged. HCUP variables that are calculated from PRDATEn are computed before PRDATEn is masked.

Colorado

Beginning in 1997, Colorado provided the principal procedure date (PRDATE1) with a four-digit year. In prior years, only a two-digit year was available.

PRDAYn Number of days from admission to procedure n

Variable	Description	Value	Value Description
PRDAYn	Day of procedure	-4 - -1 0 1 - LOS+1 . .A .B .C	Days prior to Admission Day of Admission Days after Admission Missing Invalid Unavailable from Source Inconsistent: ED7nn, ED8nn

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

The day on which the principal procedure is performed (PRDAY1) is calculated from the procedure date (PRDATE) and the admission date (ADATE) with the following exceptions:

- PRDAY1 is set to the supplied day of principal procedure if the procedure day cannot be calculated (ADATE and/or PRDATE is missing or invalid). Note: the supplied day of procedure is used only if it distinguishes between a procedure performed on the first day (procedure day = 0) and no procedure day (procedure day is missing).

- PRDAY1 is missing (.) if the procedure day cannot be calculated and the supplied procedure day is missing.

- PRDAY1 is invalid (.A) if the procedure day cannot be calculated and the supplied procedure day is non-numeric.

- PRDAY1 is set to inconsistent (.C) by two edit checks ED701 and ED801. Both are described below.

- PRDAY1 is unavailable from the data source (.B) if the data source does not supply either

- admission date (ADATE) and procedure date (PRDATE1), or
- day of principal procedure.

Edit Checks

ED701 sets PRDAY1 to inconsistent (.C) if no principal procedure is coded (PR1 = " ") and there is a non-missing day of procedure.

ED801 sets PRDAY1 to inconsistent (.C) if the procedure day occurred outside of stay. PRDAY must be

Lower bound < = PRDAY < = Upper bound.

The LOWER BOUND, which ranges from -4 to 0, allows for preadmission procedures, which are often bundled into the hospital stay for reimbursement, up to four days prior to the hospital

admission. A value of -4 is used unless the data source documentation indicates that negative values are invalid. Even then, if a large number of discharges have negative values in the initial data investigations, the accuracy of the data documentation is verified with the data source.

The UPPER BOUND depends on LOS which has been edited only to verify that it is non-negative. (Note: Editing of LOS for other types of questionable values is performed after the upper bound for PRDAY is set. Thus, in some instances PRDAY is validated using an upper bound that is later found to be questionable.)

- If LOS is a valid non-negative value, then the upper bound is LOS + 1.

- Otherwise, the upper bound is the maximum value allowed during HCUP processing (32,767).

Availability of Day of Procedure

Some sources do not require procedure dates/days for minor or diagnostic procedures which are considered UHDDS class 3 and class 4 procedures. The UHDDS system grouped ICD-9-CM procedure codes into four classes differentiated by impact on either the well-being of the patient or on the health care system. The criteria used to classify procedures included procedural risk, anesthetic risk, and the need for highly trained personnel, special facilities or special equipment. The classes are:

- Class 1: Surgical
- Class 2: Significant procedure (date required)
- Class 3: Significant procedure (date not required)
- Class 4: Minor procedures not normally coded on inpatient data.

All States

The day on which the procedure was performed (PRDAYn) is calculated from the admission date (ADATE) and procedure date (PRDATEn) before these dates are masked. To ensure the confidentiality of patients, the day portion of the dates stored in ADATE and PRDATEn are overwritten with “01" during the creation of the Publicly Released SID. The month and year portion of these dates remains unchanged.

Arizona

Beginning in 1995, only the calculated day of procedure could be used to assign PRDAY because Arizona did not supply the day of procedure. Prior to 1995, no procedure dates or days were reported.

California

The supplied day of procedure was not used when PRDAY could not be calculated because California used the same value to indicate no procedure performed and procedure performed on the day of admission.

Colorado

Only the calculated day of principal procedure could be used to assign PRDAY1 because Colorado did not supply principal procedure day.

Florida

For 1988-1992, PRDAY1 is assigned from the supplied day of procedure. Florida did not supply the procedure date. A missing value (.) was assigned from either of the following values supplied by the data source: 998 an indicator that the number of days to procedure is greater than or equal to 998 days; and 999 an indicator of unable-to-compute days, or that no procedure was performed.

Starting in 1993, Florida used zeros to code both missing values and a procedure performed on the day of admission. During HCUP processing, PRDAY1 was set to missing (.) if

- the reported procedure day = 0, and
- no principal procedure was reported.

Iowa

Only the calculated day of procedure could be used to assign PRDAY because Iowa did not supply the day of procedure.

Massachusetts

The supplied day of procedure was not used when PRDAY could not be calculated because Massachusetts used the same value to indicate no procedure performed and procedure performed on the day of admission.

New Jersey

Only the calculated day of procedure could be used to assign PRDAY because New Jersey did not supply the day of procedure.

New York

PRDAYn could not be calculated because New York did not report full admission and procedure dates. During HCUP processing, only the reported procedure day could be used to assign PRDAYn.

For 1988-1992, the source miscalculated procedure days for records with admission dates in the year prior to discharge, resulting in procedure days that were not during the stay. These records failed the appropriate edit check.

Beginning in 1993, the source correctly calculated procedure days for all procedures.

Oregon

Only the calculated day of procedure could be used to assign PRDAYn because Oregon did not supply principal days.

South Carolina

Only the calculated day of procedure could be used to assign PRDAYn because South Carolina did not supply the day of procedure.

Wisconsin

Until 1997, PRDAYn could not be calculated because Wisconsin did not report procedure dates. During HCUP processing, only the reported procedure day could be used to assign PRDAYn. Beginning in 1997, Wisconsin provided the date of principal procedure (PRDATE1).

Principal procedure day is only required for major procedures (defined below). Procedure days are set to missing for all other cases.

Major procedures are defined as Class 1 or 2 procedures. The UHDDS system grouped ICD-9-CM procedure codes into four classes differentiated by impact on either the well-being of the patient or on the health care system. The criteria used to classify procedures included procedural risk, anesthetic risk, and the need for highly trained personnel, special facilities or special equipment. The classes are:

- Class 1: Surgical
- Class 2: Significant procedure (date required)
- Class 3: Significant procedure (date not required)
- Class 4: Minor procedures not normally coded on inpatient data.

PROCESS HCUP processing identification record number

Variable	Description	Value	Value Description
PROCESS	Processing number	11(n)	Processing Number

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

Processing number (PROCESS) is coded YYSSnnnnnnn, where:

YY = discharge year,
SS = state FIPS code, and
nnnnnnn = a 7-digit sequence number.

PROCESS is assigned to each discharge record in the earliest stage of HCUP processing, so that it can be used to track records throughout production.

PROCESS is kept on delivered files to facilitate the tracking of specific discharges back to the original raw data, should that be necessary.

PRSYS Procedure coding system

Variable	Description	Value	Value Description
PRSYS	Procedure system	1 2 3 . .A	ICD-9-CM CPT-4 HCPCS/CPT-4 Missing Invalid

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

PRSYS indicates the coding system for the procedures:

- Almost all HCUP inpatient stays use ICD-9-CM procedure codes (PRSYS = 1).

- If Physicians' Current Procedural Terminology (CPT) or HCFA Common Procedure Coding System (HCPCS) procedure codes are indicated (PRSYS = 2 or 3), then the procedure codes are set to missing (PRn = blank). CPT and HCPCS procedure codes could not be retained in the HCUP data because they are 5 characters, and the HCUP procedure fields are 4 characters in length.

- If the procedure coding system was not specified by the data source, then PRSYS is missing (PRSYS = .).

PRVn Validity Flag: Procedure n

Variable	Description	Value	Value Description
PRVn	Procedure validity flag	0 1 . .C	Valid code Invalid code No proc code Inconsistent: ED2nn, ED5nn

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

PRVn are validity flags that identify invalid or inconsistent procedures in the variables PRn. There is one validity flag for each procedure, i.e., PRV1 is the validity flag for PR1.

The following are acceptable values for PRVn:

0 indicates a valid and consistent procedure code.

1 indicates an invalid code for the discharge date. A six-month window around the discharge date (three months before and three months after) is allowed for anticipation of or lags in response to official ICD-9-CM coding changes.

. indicates a missing (blank) procedure code.

.C indicates that the code is inconsistent with other data (i.e., age or sex) on the discharge abstract. See the Technical Supplement on *Quality Control in HCUP Data Processing* for more information.

PSTCO Patient state/county FIPS code

Variable	Description	Value	Value Description
PSTCO	Patient state/county	nnnnn . .A	State/County FIPs Code Missing Invalid

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

PSTCO is coded from county supplied by the data source only when that information was not derived from the zip code.

Colorado

In 1993, Colorado began collecting patient county code, but it was optional for hospitals to report this data to the hospital association. The hospital association reports PSTCO for Colorado counties only.

Iowa

Beginning in 1993, FIPS state and county codes are available, but for Iowa counties only.

New Jersey

New Jersey classifies patient state and county codes for residents of New Jersey. The patient state and county codes are available for residents of New York and Pennsylvania in some years. For patients from states other than New Jersey, New York and Pennsylvania, PSTCO contains a valid FIPS state code (first two digits) and “000" for the county code (last three digits).

South Carolina

South Carolina separately classifies patient state and county codes for residents of South Carolina, North Carolina, and Georgia. Residents of Georgia and North Carolina may have a specific county code or the county code may be missing (000).

For patients classified by the data source as residents of states other than South Carolina, North Carolina, or Georgia, and patients whose state and county codes are missing:

- PSTCO is assigned to invalid (.A) in the 1993 data, and

- PSTCO is assigned to missing (.) beginning in the 1994 data.

RACE Race

Variable	Description	Value	Value Description
RACE	Race	1	White
		2	Black
		3	Hispanic
		4	Asian or Pacific Islander
		5	Native American
		6	Other
		.	Missing
		.A	Invalid
		.B	Unavailable from Source

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

HCUP coding includes race and ethnicity in one variable (RACE). If the source supplied race and ethnicity in separate variables, ethnicity takes precedence over race in setting the HCUP value for race.

California

Beginning in 1995, California reports Spanish/Hispanic ethnicity as a category of race and as a separate variable. During HCUP processing, patient race was assigned as Hispanic (RACE = 3) if the source coded either ethnicity or race as Spanish/Hispanic. Other categories of RACE were assigned from the source race variable.

The state data report in effect for 1988-1994 indicated that some California hospitals reported large numbers of patients as "Other" or "Unknown" race. Prior to 1993, California performed edit checks on patient race and returned the data to hospitals for correction if more than a small percentage of records were "Other" or "Unknown" race. From 1993-1994, only extreme case were questioned and corrected. Information was not available about the prevalence of this practice or the occurrence after 1994.

Colorado

In 1993, Colorado began collecting patient race, but it was optional for hospitals to report this data to the hospital association.

Florida

Starting in 1992, Florida supplied RACE. The Hispanic category (RACE = 3) includes both "White

Hispanic" and "Black Hispanic."

Iowa

Iowa does not separately classify Hispanic (RACE = 3). No documentation was available about how these were coded.

Iowa uses one category for "Other" and "Unknown", which is assigned to the HCUP category for missing (.).

Some Iowa hospitals report "Other" race for all or a high percentage of their discharges. Some hospitals report "White" race for all discharges.

Maryland

Beginning in 1993

Maryland reported Hispanic ethnicity as a separate variable. If patient ethnicity was coded as Spanish/Hispanic origin, patient race was set to Hispanic (RACE = 3) during HCUP processing.

Prior to 1993

Maryland did not report Hispanic ethnicity as a separate variable or category of race. Hispanic ethnicity (RACE = 3) is not coded in the 1988-1992 HCUP Maryland data. The source documentation available for Maryland did not indicate which race code(s) were used for Hispanic ethnicity.

New Jersey

Beginning in 1993

New Jersey reported Hispanic ethnicity as a separate variable. If patient ethnicity was coded as Hispanic (Mexican, Puerto Rican, Cuban, Central or South American, Other or Unknown Hispanic), patient race was set to Hispanic (RACE = 3) during HCUP processing.

Prior to 1993

New Jersey reported Hispanic ethnicity as a category of race. If New Jersey reported patient race as Hispanic, HCUP assigned patient race as Hispanic (RACE = 3).

New York

New York reports race and ethnicity as separate variables. If patient ethnicity was coded as "Spanish/Hispanic Origin", patient race was set to "Hispanic" (RACE = 3) during HCUP processing.

Wisconsin

After 7/1/90, Wisconsin supplied race and ethnicity in two separate variables. The ethnicity variable was used to assign Hispanic (RACE = 3) and the race variable was used to assign all other categories of RACE. Prior to 7/1/90, RACE was unavailable from source (.B).

RATEn Daily rate

Variable	Description	Value	Value Description
RATEn	Daily rate	4(n).nn . .A	Charges Missing Invalid

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

Positive values are retained as received from the data source. Zero values are retained and NOT set to missing (.). Negative values are set to invalid (.A).

New York

RATE1-RATE5 contain accommodation rates.

Revenue Codes for Detailed Charges

See note under revenue codes (REVCDn) for definitions of revenue codes associated with these accommodation rates (RATEn). Detailed charges (CHGn) are associated with the identified revenue centers (REVCDn), units of service (UNITn) and rates (RATEn). For example, CHG1 applies to the revenue center in REVCD1 for the rate in RATE1 and the units of service specified in UNIT1. Revenue codes are available for accommodation and ancillary charges. Units and rates are available for accommodation charges.

Adjustment to Charges for Interim Bills

For 1988-1992, when the length of stay from the Discharge Data Abstract did not equal the length of the billing period from the Uniform Billing Form, total charges (TOTCHG) and charge details (CHGn, RATEn, UNITn, REVCDn) were set to missing (.) because this billing information pertained only to the billing period, not the complete inpatient stay. However, TOTCHG_X contains the original value from the billing record.

Beginning in 1993, billing dates were not reported by New York and the adjustment to charge details (CHGn, RATEn, UNITn, REVCDn) was not made.

RDRG Refined DRG

Variable	Description	Value	Value Description
RDRG	Refined DRG	nnnn . .A	RDRG Missing Invalid

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

Refined DRGs were developed at Yale University in response to criticism that HCFA DRGs were not appropriate for non-Medicare populations and did not adequately adjust for patient severity. The HCFA DRGs were expanded to better accommodate pediatric and neonate cases, and DRGs for other high cost conditions like trauma and HIV were expanded. All age and complications and comorbidity (CCs) splits of HCFA DRGs were eliminated and replaced by subclasses (Refinement Classes) to indicate severity. Some RDRGs are consistent with HCFA DRGs.

Secondary diagnoses are used to determine complications and comorbidity. The CCs are used to subdivide DRGs into Refinement Classes based upon the highest level secondary diagnosis. Surgical patients are split into the four Refinement Classes. Medical patients are split into three Refinement Classes. The Refinement Class indicates varying levels of impact on patient resource use.

Surgical Refinement Class	Medical Refinement Class	Description
0	0	Baseline/No substantial CCs
1	1	Moderate CCs
2	2	Major CCs
3	-	Catastrophic CCs

RDRG codes are supplied by the data source. During HCUP processing, source values are maintained as reported. The last digit of the RDRG value is the refinement class. The preceding digit(s) are the refined DRG category. Consider the following examples:

HCUP RDRG Value	Refined DRG Category	Refinement Class
50	5	0
892	89	2
1821	182	1

Oregon

Beginning in 1997, Oregon supplied the Refined DRG (RDRG). There was no source documentation on which version of the HCFA Grouper was used to assign the RDRGs.

Washington

Based on documentation supplied by Washington, the HCFA Grouper version for RDRG is as follows:

Time Period	HCFA Grouper Version
10/92 - 9/93	10.0
10/93 - 9/94	11.0
11/94 - 9/95	12.0
10/95 - 9/96	13.0
10/96 - 9/97	14.0
10/97 - 9/98	15.0.

RDRGWT Refined DRG Weight

Variable	Description	Value	Value Description
RDRGWT	Refined DRG Weight	nnnn.nn . .A	RDRG Weight Missing Invalid

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

The RDRG relative weight (RDRGWT) is supplied by the data source. During HCUP processing, the weights are assigned as reported, without modification.

Washington

Based on documentation supplied by Washington, the version of the Washington State specific RDRG relative weight (RDRGWT) is as follows:

Time Period	Washington State specific relative weight Version
1993	11.0
1994	12.0
1995	13.0
1996	14.0
1997	15.0

When Washington first supplied RDRG weight in their 1993 inpatient data, source documentation specified a format of 6.2 (nnnn.nn) for RDRGWT. Beginning in 1995, source documentation specified a format of 6.4 (nn.nnnn) for RDRGWT. For consistency across years, RDRGWT continues to be retained in the 6.2 (nnnn.nn) format.

READMIT Readmission

Variable	Description	Value	Value Description
READMIT	Readmission	0 1 . .A	Not A Readmission Readmission Missing Invalid

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

READMIT uses source-specific coding.

New Jersey

A readmission (READMIT = 1) is defined as admission to the same facility from which the patient was discharged within the previous seven days.

REVCDn Revenue code

Variable	Description	Value	Value Description
REVCDn	Revenue code	aaaa blank	Revenue Code Missing or Invalid

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

Revenue codes are retained as received from the data source. No validity checks are performed.

New York

In all years,

REVCD1-REVCD5 contain accommodation revenue centers and
REVCD6-REVCD25 contain ancillary revenue centers.

Detailed charges (CHGn) are associated with the identified revenue centers (REVCDn), units of service (UNITn) and rates (RATEn). For example, CHG1 applies to the revenue center in REVCD1 for the rate in RATE1 and the units of service specified in UNIT1. Revenue codes are available for accommodation and ancillary charges. Units and rates are available for accommodation charges.

Adjustment to Charges for Interim Bills

For 1988-1992, when the length of stay from the Discharge Data Abstract did not equal the length of the billing period from the Uniform Billing Form, total charges (TOTCHG) and charge details (CHGn, RATEn, UNITn, REVCDn) were set to missing (.) because this billing information pertained only to the billing period, not the complete inpatient stay. However, TOTCHG_X contains the original value from the billing record.

Beginning in 1993, billing dates were not reported by New York and the adjustment to charge details (CHGn, RATEn, UNITn, REVCDn) was not made.

Revenue Codes for Accommodations

Valid accommodation revenue codes used in REVCD1-REVCD5 are listed below:

– Codes marked by an asterisk (*) are valid in all years
– Codes marked with a dash (-) are only valid beginning in 1994
– All other codes are only valid before 1994

203x Detoxification Unit - Alcohol Acute

– 204x Alcohol Rehabilitation - Acute Care
  205x Mental Retardation - Acute Care
  208x Detoxification Unit - Drug Acute
  217x Mental Rehabilitation - Acute Care
– 218x Rehabilitation - Medical Acute
– 219x Alternate Level of Care Unit
– 301x Medical/Surgical - Acute
– 317x Pediatric - Acute
– 321x Psychiatric - Acute
– 325x Obstetrics (including gynecological)
  363x Psychiatric - Long Term Care
– 370x AIDS Unit
– 376x Drug Rehabilitation - Acute Care
– 377x Epilepsy Unit
– 378x Comprehensive Psychiatric Emergency Program Observation Bed
– 379x Tuberculosis
– 380x Traumatic Brain Injury - Acute Care
– 381x Ventilator Dependent - Acute Care
– 382x Other Long-Term Care
– 383x Skilled Nursing Facility
– 384x Hospice

Valid fourth digits ("x") for the above accommodation codes are:

1 Private Room - 1 bed
2 Semi-Private - 2, 3, or 4 beds
3 Ward - 5 or more beds
6 Isolation - special isolation services
8 Alternate Level of Care

The following accommodation revenue codes, used in REVCD1-REVCD5, were always used exactly as they are listed below.

3310 Medical/Surgical Intensive Care
3330 Coronary Care
3350 Pediatric Intensive Care
3370 Neonatal Intensive Care
3380 Burn Care
3410 Other Intensive Care
3510 Newborn Nursery
3520 Premature Nursery
3711 Secured Room Charge (correctional facility inmates only)

Revenue Codes for Ancillary Services

Ancillary revenue center codes are three-character codes. For 1988-1992 data, the ancillary revenue center codes are left-justified, with a blank in the fourth column (e.g., ’401 ’). Beginning with the 1993 data, the ancillary revenue center codes are right-justified, with a leading zero (e.g., ’0401’).

Ancillary Revenue Codes: Beginning in 1994

Beginning in 1994, New York employed a set of state-specific Ancillary revenue codes based on the UB-92 coding system. The new system is extensive and well documented in Appendix J of the SPARCS Inpatient Output Data Dictionary.

Ancillary Revenue Codes: 1988-1993

For 1988-1993, the following lists the valid ancillary revenue codes used in REVCD6-REVCD25.

116 Electroshock Therapy
117 Intravenous Therapy
119 Pulmonary Function, Other
120 Diagnostic Services, Other
127 Lithotripsy
136 Gastro-Intestinal Services
137 Gastro-Intestinal Services, other
138 Urology
139 Oncology
234 Ambulance Service
235 Clinic
236 Emergency Room
401 Labor and Delivery Services
404 Operating Room Services
406 Recovery Room
408 Anesthesiology
411 Medical/Surgical Supplies
415 Pharmacy
421 Laboratory Services - Clinical
423 Laboratory Services - Pathology
426 Blood Processing and Storage
429 Electrocardiography (EKG/ECG)
431 Cardiac Catheterization Laboratory
432 Radiology Diagnostic
434 CT Scanner
436 Radiology Therapeutic
438 Nuclear Medicine
442 Respiratory Therapy
444 Pulmonary Function Testing
446 Neurology - Diagnostic (EEG)
451 Physical Therapy
453 Occupational Therapy
455 Speech - Language Pathology
457 Recreational Therapy
458 Audiology
459 Physical Medicine, other
467 Psychiatric/Psychological Service
471 Renal Dialysis - General
473 Organ Acquisition - General
475 Organ Acquisition - Other Donor Bank
476 Hemodialysis (Inpatient)
477 Peritoneal Dialysis (Inpatient)
478 Continuous Ambulatory Peritoneal Dialysis (CAPD) Inpatient
479 Continuous Cycling Peritoneal Dialysis (CCPD) Inpatient
491 Ancillary Services, other

561 Telephone and Telegraph Revenue
584 Television/Radio Rentals
990 Outpatient Services, Other

Washington

Overview

Revenue codes (REVCDn) identify the revenue center for which the detailed charges (CHGn) apply in the number of units (UNITn) given. For example, CHG1 applies to the revenue center in REVCD1 and the units of service specified in UNIT1. Units are not required for all revenue sources; the units field may be coded as missing (.) or zero.

Caveats

Outpatient revenue codes (REVCDn = 500 or 509) are used when patient is admitted as an inpatient before midnight of the day following the date of service. Late discharges for medical necessity are to be shown under Discharge, Medically Necessary (REVCDn = 224), rather than under room charge. Hourly nursing charges are in addition to room and board for ICU and CCU. Other Drugs (REVCDn = 259) is a code for "Generic Take Home Drugs." Treatment or Observation Room revenue codes are used when the patient is held in an observation room and then subsequently admitted.

Invalid Revenue Codes

Revenue codes in 1988-1992 were kept as reported; no validity check was performed. In 1993-1994, invalid revenue codes (values less than 100, greater than 999, and alpha-numeric codes) were set to “A” (REVCDn = “A”). Starting in 1995, invalid codes were set to missing (REVCDn = “ ”).

Revenue Codes and Associated Units

Below are the revenue codes and units associated with the charges for each patient bill:

MEDICARE REQUIRED
ROOM AND BOARD, PRIVATE UNITS OF SERVICE

110 = General Classification	DAYS
111 = Medical/Surgical/GYN	DAYS
112 = OB	DAYS
113 = Pediatric	DAYS
114 = Psychiatric	DAYS
115 = Hospice	DAYS
116 = Detoxification	DAYS
117 = Oncology	DAYS
118 = Rehabilitation	DAYS
119 = Other	DAYS

ROOM AND BOARD, SEMI PRIVATE TWO BEDS

120 = General Classification	DAYS
121 = Medical/Surgical/GYN	DAYS
122 = OB	DAYS

123 = Pediatric DAYS
124 = Psychiatric DAYS
125 = Hospice DAYS
126 = Detoxification DAYS
127 = Oncology DAYS
128 = Rehabilitation DAYS
129 = Other DAYS

ROOM AND BOARD, SEMI PRIVATE THREE AND FOUR BEDS

130 = General Classification DAYS
131 = Medical/Surgical/GYN DAYS
132 = OB DAYS
133 = Pediatric DAYS
134 = Psychiatric DAYS
135 = Hospice DAYS
136 = Detoxification DAYS
137 = Oncology DAYS
138 = Rehabilitation DAYS
139 = Other DAYS

PRIVATE (DELUXE)

140 = General Classification DAYS
141 = Medical/Surgical/GYN DAYS
142 = OB DAYS
143 = Pediatric DAYS
144 = Psychiatric DAYS
145 = Hospice DAYS
146 = Detoxification DAYS
147 = Oncology DAYS
148 = Rehabilitation DAYS
213 = Heart Transplant DAYS
214 = Post CCU DAYS
219 = Other Coronary Care DAYS

SPECIAL CHARGES

220 = General Classification
221 = Admission Charge
222 = Technical Support Charge
223 = U.R. Service Charge
224 = Late Discharge, Medically Necessary
229 = Other Special Charges

INCREMENTAL NURSING CHARGE RATE

230 = General Classification
231 = Nursery
232 = OB
233 = ICU - Includes Transitional Care
234 = CCU - Includes Transitional Care
235 = Hospice
239 = Other Coronary Care

ALL INCLUSIVE ANCILLARY

240 = General Classification
249 = Other Inclusive Ancillary

PHARMACY

250 = General Classification
251 = Generic Drug
252 = Non-Generic Drug
253 = Take Home Drug
254 = Drugs Incident to Other Diag. Srvs.
255 = Drugs Incident to Radiology
256 = Experimental Drugs
257 = Non-Prescription
258 = IV Solutions
259 = Other Drugs

IV THERAPY (HOME IV THERAPY)

260 = General Classification
261 = Infusion Pump
262 = IV Therapy/Pharmacy Services
263 = IV Therapy/Drug/Supply Delivery
264 = IV Therapy/Supplies

RADIOLOGY - THERAPEUTIC

330 = General Classification
331 = Chemotherapy - Injected
332 = Chemotherapy - Oral
333 = Radiation Therapy
335 = Chemotherapy - IV
339 = Other

NUCLEAR MEDICINE

340 = General Classification
341 = Diagnostic
342 = Therapeutic - Oral
349 = Other

CT SCAN

350 = General Classifications # Scans
351 = Head Scan # Scans
352 = Body Scan # Scans
359 = Other CT Scan # Scans

OPERATING ROOM SERVICES

360 = General Classification
361 = Minor Surgery
362 = Organ Transplant - Other than Kidney

367 = Kidney Transplant
369 = Other Operating Room Services

ANESTHESIA

370 = General Classification
371 = Anesthesia Incident to Radiology
372 = Anesthesia Incident to Other Diag. Srvs.
374 = Acupuncture
379 = Other Anesthesia

BLOOD

380 = General Classification
381 = Packed Red Cells
382 = Whole Blood
383 = Plasma
384 = Platelets
385 = Leucocytes
386 = Other Components
387 = Other Derivatives (cryopricipitates)
389 = Other Blood

BLOOD STORAGE AND PROCESSING

390 = General Classification
391 = Blood Administration
399 = Other Blood Storage and Processing

OTHER IMAGING SERVICES

480 = General Classification
481 = Cardiac Catheterization Lab
482 = Stress Test
489 = Other Cardiology

AMBULATORY SURGICAL CARE

490 = General Classification
499 = Other Ambulatory Surgical Care

OUTPATIENT SERVICES

500 = General Classification
509 = Other

CLINIC

510 = General Classification
511 = Chronic Pain Center
512 = Dental Clinic
513 = Diabetic Counseling
514 = OB-GYN Clinic
515 = Pediatric Clinic

519 = Other Clinic

FREESTANDING CLINIC

520 = General Classification
521 = Rural Health Clinic
522 = Rural Home Health
523 = Family Practice
529 = Other Clinic

OSTEOPATHIC SERVICES

530 = General Classification
531 = Osteopathic Therapy
539 = Other Osteopathic Services

AMBULANCE

540 = General Classification	# Miles
541 = Supplies	# Miles
542 = Medical Transport	# Miles
543 = Heart Mobile	# Miles
544 = Oxygen	# Miles
545 = Air Ambulance	# Miles
546 = NeoNatal Amb, Support Crews	# Miles
547 = Pharmacy	
548 = EKG (Telephonic Transmission)	
549 = Other Ambulance	# Miles

SKILLED NURSING

550 = General Classification	DAYS
551 = Visit Charge	DAYS

CAST ROOM

700 = General Classification
702 = Other Cast Room

RECOVERY ROOM

710 = General Classification
712 = Other Recovery Room

LABOR ROOM/DELIVERY

720 = General Classification	DAYS
721 = Labor	HOURS/DAYS
722 = Delivery	HOURS/DAYS
723 = Circumcision	
724 = Birthing Center	HOURS/DAYS
729 = Other Labor Room/Delivery	DAYS

EKG/ECG (ELECTROCARDIOGRAM)

730 = General Classification
731 = Holter Monitor
732 = Telemetry
739 = Other EKG/ECG

EEG (ELECTROENCEPHALOGRAM)

740 = General Classification
749 = Other EEG

GASTRO-INTESTINAL SERVICES

750 = General Classification
759 = Other Gastro-Intestinal Services

TREATMENT OR OBSERVATION ROOM

760 = General Classification
769 = Other Treatment Room

LITHOTRIPSY

790 = General Classification
799 = Other Lithotripsy

INPATIENT RENAL DIALYSIS

800 = General Classification	# Sessions
801 = Inpatient Hemodialysis	# Sessions
802 = Inpatient Peritoneal (NON-CAPD)	# Sessions
803 = Inpatient (CAPD)	# Sessions
804 = Inpatient Continuous Cycling Peritoneal	# Sessions
809 = Other Inpatient Dialysis	# Sessions

ORGAN ACQUISITION

810 = General Classification	
811 = Living Donor - Kidney	
943 = Cardiac Rehabilitation	# Visits
944 = Drug Rehabilitation	# Visits
945 = Alcohol Rehabilitation	# Visits
946 = Air Fluidize Support Beds	Days
947 = Complex Medical Equipment	Days
948 = Occupational Therapy	# Visits
949 = Other Therapeutic Services	# Visits

PATIENT CONVENIENCE ITEMS

990 = General Classification
991 = Cafeteria/Guest Tray
992 = Private Linen Service
993 = Telephone/Telegraph
994 = TV/Radio

995 = Nonpatient Room Rentals
996 = Late Discharge Charge
997 = Admission Kits
998 = Beauty Shop/Barber
999 = Other Patient Convenience Items
851 = Peritoneal/Composite or Other Rate
852 = Home Supplies
853 = Home Equipment
854 = Maintenance/100%
855 = Support Services
859 = Other Outpatient CCPD

PROFESSIONAL FEES

960 = General Classification
961 = Psychiatric
962 = Ophthalmology
963 = Anesthesiologist (MD)
964 = Anesthetist (CRNA)
969 = Other Professional Fees
971 = Laboratory
972 = Radiology - Diagnostic
973 = Radiology - Therapeutic
974 = Radiology - Nuclear Medicine
975 = Operating Room
976 = Respiratory Therapy
977 = Physical Therapy
978 = Occupational Therapy
979 = Speech Pathology
981 = Emergency Room
982 = Outpatient Service
983 = Clinic
984 = Medical Social Services
985 = EKG
986 = EEG
987 = Hospital Visit
988 = Consultation
989 = Private Duty Nurse

SEQ_SID HCUP SID record sequence number

Variable	Description	Value	Value Description
SEQ_SID	SID Sequence number	13(n)	SID Sequence Number

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

Sequence number (SEQ_SID) is a unique number assigned to each discharge beginning in 1994. SEQ_SID does not match the sequence number, SEQ.

Beginning in 1994

SEQ_SID is included in both the Nationwide Inpatient Sample and the State Inpatient Databases. SEQ_SID is identical for discharges present in both the HCUP Nationwide Inpatient Sample and State Inpatient Databases.

The State Inpatient Databases are sorted by SEQ_SID, and the Nationwide Inpatient Sample is sorted by SEQ.

From 1988 - 1993

SEQ_SID is not included in either the HCUP Nationwide Inpatient Sample or the State Inpatient Databases.

SEX Sex

Variable	Description	Value	Value Description
SEX	Sex	1 2 . .A .B .C	Male Female Missing Invalid Unavailable from Source Inconsistent: ED1nn, ED2nn

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

All non-male, non-female (e.g., "other") values are set to missing (.).

If SEX is inconsistent with diagnoses (ED101-ED1nn) or procedures (ED201-ED2nn), SEX is set to inconsistent (.C).

Colorado

According to the documentation available from the source, "Other/Unknown" includes patients undergoing sex changes, undetermined sex, live births with congenital abnormalities, and patients whose sex was unavailable from any source document.

The source value for "Other/Unknown" was recoded to missing (.), during HCUP processing of 1988-1992 discharges. Beginning in 1993, "Other/Unknown" was recoded to invalid (.A) during HCUP processing.

Florida

Beginning in 1997, Florida reports an "Other" sex category. These values are included under missing (.).

SURGID_S Primary surgeon number (synthetic)

Variable	Description	Value	Value Description
SURGID_S	Primary surgeon number (synthetic)	16(a) blank	Synthetic Surgeon ID Missing

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

SURGID_S contains a fixed-key (one-to-one) encryption of the supplied surgeon number (SURGID), according to the following rules:

- All alphanumeric digits are used in the encryption.
- All symbols such as ".,:;'*@" are retained in the encrypted value, but not in the same location.
- Unprintable characters in the original value are also retained.
- Leading zeros are encrypted so that the two original physician identifiers "000A0" and "A0" are distinctly different.
- When the original attending physician and primary surgeon identifiers are the same, the synthetic identifiers, MDID_S and SURGID_S, are the same.

Except in those data sources where physician license numbers are supplied, it is not known whether the surgeon identifier SURGID_S refers to individual physicians or to groups. If the surgeon numbers supplied by the data source are not restricted to license numbers, the state-specific note includes available information about reporting practices, including whether SURGID_S refers to individual physicians or to groups.

Arizona

The identification number for primary surgeons(SURGID_S) may not accurately track physicians across hospitals for the following reasons:

- Some hospitals assign their own internal other physician identification numbers rather than using the license numbers issued by the licensing agency of the physician or other health care practitioner. Information was not available about the prevalence of this practice.

- Some hospitals use one identification number for several physicians that are part of the same physician practice group. Information was not available about the prevalence of this practice.

Arizona’s identification number for primary surgeons includes license numbers from the following board of examiners: Medical, Osteopathic, Podiatrists, and Nurses. In addition, Arizona accepts licensing numbers from other health practitioner licensing boards, but these boards are unspecified.

Colorado

The primary surgeon number (SURGID_S) may not accurately track physicians across hospitals. The state encourages hospitals to use the Professional State License Number as an identifier, but some hospitals continue to use their own internal identification number. Information was not available to determine the prevalence of this practice.

Some hospitals may use one license number for all physicians in order to protect physician confidentiality. Information was not available about the prevalence of this practice.

Florida

Florida reports state license numbers as physician identifiers. Source documentation includes an extensive description of the allowable values in the field.

Iowa

Beginning in 1994, Iowa reports a principal physician ID (SURGID_S) in addition to the attending physician ID (MDID_S).

Iowa reports Universal Physician Identification Numbers (UPINs) as physician identification numbers.

Maryland

Maryland reports a state license number assigned by the Medical Chirurgical Faculty of Maryland (MED CHI) as physician identifiers. Source documentation describes strict assignment and verification rules for this field.

New Jersey

The coding of primary surgeon identification number (SURGID_S) varies across years:

Year	Physician Identifier
1988-93	New Jersey state license numbers
1994-95	Universal Physician Identification Numbers (UPINs)
Beginning in 1996	New Jersey state license numbers.

New York

New York reports state license numbers as physician identifiers. Source documentation indicates that if the operating physician did not possess a valid New York state license number, the license number of the attending physician or Chief of Service should have been reported.

New York does not limit this field to physicians; dentists, podiatrists, psychologists, nurse/midwifes, and other licensed health care professional may be included. It is impossible to identify the different types of providers in the HCUP data.

Washington

Washington reports this identifier as "Other Physician ID" which can refer to any physician who performs the procedure, not just a surgeon.

The Washington physician identifiers may not accurately track physicians across hospitals. Washington collects several different types of physician identifiers, depending on the type of identifier provided by the hospitals. Hospitals provide Medicaid, Universal Physician Identification Numbers (UPINs), and DOH/HPQAD license numbers as physician identifiers.

TMDXn Time of onset: Diagnosis n

Variable	Description	Value	Value Description
TMDXn	Time of onset for each diagnosis	0 1 . .A	DXn not present at admit DXn present at admit Missing or DXn is an E-code Invalid

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

TMDXn indicates the time of onset of each diagnosis (DXn) -— i.e., for each diagnosis, whether it began at or during the admission. This provides an indicator of complications arising during a hospitalization.

If there is a time of onset for which no diagnosis code is present, TMDXn is discarded.

California

Beginning in 1997, TMDX1-TMDX25 is available. California supplies 30 diagnoses; time of onset of each diagnosis is only coded for DX1-DX25 because DX26-DX30 contain E-codes.

New York

TMDX1 was not supplied by New York, because the principal diagnosis was, by definition, present at the time of admission. Therefore, TMDX1 was imputed to a value of one for all records.

TMDXnn for E-codes were not reported by New York and were set to missing (.) during HCUP processing.

TOTCHG Total charges (cleaned)

Variable	Description	Value	Value Description
TOTCHG	Total charges, cleaned	10(n) . .A .B .C	Total Charge Missing Invalid Unavailable from Source Inconsistent: ED911, ED921

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

TOTCHG contains the total charge supplied by a data source with the following exceptions:

- Values are rounded to the nearest dollar;
- Zero charges are set to missing (.);
- Negative charges are set to invalid (.A); and
- If charges per day (TOTCHG/LOS) are unjustifiably low (ED911) or high (ED921), then TOTCHG is set to inconsistent (.C).

Total charges do not include professional fees and non-covered charges unless noted under the state-specific notes.

Arizona

Beginning in 1996, Arizona included charges for professional fees and patient convenience items in its total charges. Any charges for professional fees and convenience items were subtracted from the reported total charges during HCUP processing to make Arizona total charges (TOTCHG and TOTCHG_X) comparable to data from other states.

Due to an error in HCUP processing in 1996, some types of professional fees were not subtracted from total charges (TOTCHG and TOTCHG_X). The types of professional fees that were not subtracted include hospital visits, consultations, private duty nurses, EKGs, EEGs, and medical social services. Charges for these services were coded on 24% of the 1996 discharges, with a mean charge of $216 and a range from $1 to $5,718. In 1996 only, total charges (TOTCHG and TOTCHG_X) can be corrected by subtracting the detail charge, CHG61. No other years need correction.

In 1997, all reported professional fees were subtracted from total charges (TOTCHG and TOTCHG_X).

California

California supplied total charges only for the last 365 days of the stay for stays of more than one year (365 days). If the supplied length of stay was greater than 365 days, cleaned total charges, TOTCHG, was set to missing (.) and uncleaned total charges, TOTCHG_X, retained the supplied total charge.

Some hospitals in California (including all Kaiser and Shriner hospitals) were exempted from reporting total charges. For those hospitals, TOTCHG and TOTCHG_X were missing (.).

Source documentation indicated that hospital-based physician fees were not included in the reported total charges.

No Charges

The source reported total charges with the value of 1 for discharges with no charges ($0). These records include live donors and courtesy or research patients. Values of 1 were verified with the hospital by the source.

Prior to 1995, total charges were set to missing (TOTCHG and TOTCHG_X = .) for these records during HCUP processing. Beginning in 1995, only TOTCHG was set to missing (.) and TOTCHG_X retained the value of 1.

Colorado

According to Colorado, hospital based physician fees are excluded from total charges (TOTCHG and TOTCHG_X).

Iowa

Beginning in 1993, Iowa includes professional fees in its total charges if the hospital combines hospital and professional bills. Professional fees are subtracted from total charges (TOTCHG and TOTCHG_X) during HCUP processing to make Iowa total charges comparable to data from other states.

Prior to 1993, it was optional for hospitals to report total charges to the hospital association:

- The availability of total charges varies by hospital.
- Some hospitals have missing (.) total charges (TOTCHG and TOTCHG_X) on a large percentage of records.

Maryland

Maryland excluded the following from total charges:

- Physician charges and
- Charges not regulated by the Health Services Cost Review Commission (for example, telephone service, television charges or private duty nursing charges).

Massachusetts

Massachusetts included professional fees in its detailed and total charges, if these were included by the hospital. Hospitals are allowed, but not required, to report these professional fees in the charge fields. Individual facilities decide which professional fees are included and where. There is no way to determine which hospitals did or did not include professional fees.

From 1988 to 1993, total charges (TOTCHG and TOTCHG_X) are the sum of detailed charges, excluding the "unknown revenue center" charge (CHG43).

Beginning in 1994, an "unknown revenue center" charge was not included in the detailed charges. Total charges (TOTCHG and TOTCHG_X) equal the sum of all supplied detailed charges.

New York

For 1988-1992, when the length of stay from the Discharge Data Abstract did not equal the length of the billing period from the Uniform Billing Form, total charges (TOTCHG) was set to missing (.) because this billing information pertained only to the billing period, not the complete inpatient stay. However, TOTCHG_X contains the original value from the billing record.

Beginning in 1993, billing dates were not reported by New York and the adjustment was not made.

Due to an administrative change in the collection of billing records for 1989, a large percentage of the DDAs could not be matched to a UBF. When there was no match, charge information (TOTCHG and TOTCHG_X), which would have come from the UBF, is missing. The match rate improves over time and stabilizes after 1991. The percentage of DDA records that have a matching UBF record in the Master File are as follows:

1988	77.2%
1989	26.3%
1990	62.8%
1991	93.7%
1992	91.8%
1993	95.5%.

Oregon

Kaiser hospitals are exempt from reporting total charges. As a result, TOTCHG and TOTCHG_X are missing (.) for Kaiser hospitals in Oregon.

Beginning in 1995, some hospitals did not report total charges (TOTCHG and TOTCHG_X) on charity bills since there are no charges to the patient.

South Carolina

Beginning in 1996, professional fees and charges for patient convenience items were subtracted from the reported total charges during HCUP processing to make South Carolina total charges (TOTCHG and TOTCHG_X) comparable to data from other states.

Prior to 1996, only professional fees were subtracted from the reported total charges because the source did not supply an itemized charge for patient convenience items.

Wisconsin

An error during HCUP processing of 1993 discharges caused negative values of total charges (TOTCHG) to be set to missing (.) instead of invalid (.A). For other years, negative values of TOTCHG were processed correctly.

Wisconsin may have included professional fees and convenience items in its total charges. Hospitals are instructed to remove these fees from total charges, but some hospitals do not subtract them and others have had difficulties with their accounting software. There is no way to determine which hospitals did or did not include these items.

Hospitals are not required to report total charges for stays over 100 days.

TOTCHG_X Total charges (from data source)

Variable	Description	Value	Value Description
TOTCHG_X	Total charges, as received from data source	± 10(n).nn . .A .B	Total Charge Missing Invalid Unavailable from Source

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

TOTCHG_X contains the total charge supplied by a data source, including cents and negative values, if supplied, with the following exceptions:

- Zero charges are set to missing (.); and
- Charges that round to zero are set to missing (.).

If charges per day (TOTCHG/LOS) are unjustifiably low (ED911) or high (ED921), then TOTCHG is set to inconsistent (.C); TOTCHG_X retains the original value submitted by the source.

Total charges do not include professional fees and non-covered charges unless noted under the state-specific notes.

Arizona

Beginning in 1996, Arizona included charges for professional fees and patient convenience items in its total charges. Any charges for professional fees and convenience items were subtracted from the reported total charges during HCUP processing to make Arizona total charges (TOTCHG and TOTCHG_X) comparable to data from other states.

Due to an error in HCUP processing in 1996, some types of professional fees were not subtracted from total charges (TOTCHG and TOTCHG_X). The types of professional fees that were not subtracted include hospital visits, consultations, private duty nurses, EKGs, EEGs, and medical social services. Charges for these services were coded on 24% of the 1996 discharges, with a mean charge of $216 and a range from $1 to $5,718. In 1996 only, total charges (TOTCHG and TOTCHG_X) can be corrected by subtracting the detail charge, CHG61. No other years need correction.

In 1997, all reported professional fees were subtracted from total charges (TOTCHG and TOTCHG_X).

California

California supplied total charges only for the last 365 days of the stay for stays of more than one year (365 days). If the supplied length of stay was greater than 365 days,

- cleaned total charges, TOTCHG, was set to missing (.) and
- uncleaned total charges, TOTCHG_X, retained the supplied total charge.

Some hospitals in California (including all Kaiser and Shriner hospitals) were exempted from reporting total charges. For those hospitals, TOTCHG and TOTCHG_X were missing (.).

Source documentation indicated that hospital-based physician fees were not included in the reported total charges.

No Charges

The source reported total charges with the value of 1 for discharges with no charges ($0). These records include live donors and courtesy or research patients. Values of 1 were verified with the hospital by the source.

Prior to 1995, total charges were set to missing (TOTCHG and TOTCHG_X = .) for these records during HCUP processing. Beginning in 1995, only TOTCHG was set to missing (.) and TOTCHG_X retained the value of 1.

Colorado

According to Colorado, hospital based physician fees are excluded from total charges (TOTCHG and TOTCHG_X).

Iowa

Beginning in 1993, Iowa includes professional fees in its total charges if the hospital combines hospital and professional bills. Professional fees are subtracted from total charges (TOTCHG and TOTCHG_X) during HCUP processing to make Iowa total charges comparable to data from other states.

Prior to 1993, it was optional for hospitals to report total charges to the hospital association:

- The availability of total charges varies by hospital.
- Some hospitals have missing (.) total charges (TOTCHG and TOTCHG_X) on a large percentage of records.

Maryland

Maryland excluded the following from total charges:

- Physician charges and
- Charges not regulated by the Health Services Cost Review Commission (for example, telephone service, television charges or private duty nursing charges).

Massachusetts

Massachusetts included professional fees in its detailed and total charges, if these were included by the hospital. Hospitals are allowed, though not required, to report these professional fees in the charge fields. Individual facilities decide which professional fees are included and where. There is no way to determine which hospitals did or did not include professional fees.

From 1988 to 1993, total charges (TOTCHG and TOTCHG_X) are the sum of detailed charges, excluding the "unknown revenue center" charge (CHG43).

Beginning in 1994, an "unknown revenue center" charge was not included in the detailed charges. Total charges (TOTCHG and TOTCHG_X) equal the sum of all supplied detailed charges.

New York

For 1988-1992, when the length of stay from the Discharge Data Abstract did not equal the length of the billing period from the Uniform Billing Form, total charges (TOTCHG) was set to missing (.) because this billing information pertained only to the billing period, not the complete inpatient stay. However, TOTCHG_X contains the original value from the billing record.

Beginning in 1993, billing dates were not reported by New York and the adjustment was not made.

Due to an administrative change in the collection of billing records for 1989, a large percentage of the DDAs could not be matched to a UBF. When there was no match, charge information (TOTCHG and TOTCHG_X), which would have come from the UBF, is missing. The match rate improves over time and stabilizes after 1991. The percentage of DDA records that have a matching UBF record in the Master File are as follows:

1988	77.2%
1989	26.3%
1990	62.8%
1991	93.7%
1992	91.8%
1993	95.5%.

Oregon

Kaiser hospitals are exempt from reporting total charges. As a result, TOTCHG and TOTCHG_X are missing (.) for Kaiser hospitals in Oregon.

Beginning in 1995, some hospitals did not report total charges (TOTCHG and TOTCHG_X) on charity bills since there are no charges to the patient.

South Carolina

Beginning in 1996, professional fees and charges for patient convenience items were subtracted from the reported total charges during HCUP processing to make South Carolina total charges (TOTCHG and TOTCHG_X) comparable to data from other states.

Prior to 1996, only professional fees were subtracted from the reported total charges because the source did not supply an itemized charge for patient convenience items.

Wisconsin

An error during HCUP processing of 1993 discharges caused negative values of total charges (TOTCHG_X) to be set to missing (.): negative charges reported by the data source were not retained as reported in TOTCHG_X. For other years, negative values of TOTCHG_X were processed correctly.

Wisconsin may have included professional fees and convenience items in its total charges. Hospitals are instructed to remove these fees from total charges, but some hospitals do not subtract them and others have had difficulties with their accounting software. There is no way to determine which hospitals did or did not include these items.

Hospitals are not required to report total charges for stays over 100 days.

UNITn Units of service

Variable	Description	Value	Value Description
UNITn	Units of Service	nnnn . .A	Units of Service Missing Invalid

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

If supplied by the data source, fractional values of units of service (UNIT) are rounded, with any non-zero value less than 1 (0.01-0.99) rounded to 1.

Massachusetts

For 1988-1993, Massachusetts reported charge details and units by aggregated revenue center categories. Hospitals were responsible for mapping UB-82 revenue center codes into Massachusetts' revenue center categories. For example, all laboratory charges and units that would be charged to UB-82 revenue codes 300-312, 314, 319, and 971 were aggregated and reported to Massachusetts under one category.

Beginning in 1994, Massachusetts reported charge details and units by UB-92 revenue centers. Definitions of detail charges (CHGn) and units (UNITn) in the HCUP Massachusetts files do not necessarily match definitions in earlier years. Refer to the tables below for UNITn revenue center definitions.

The HCUP Massachusetts files for 1988-1993 include an "unknown revenue center" charge (CHG43) and units (UNIT43) that is not included for subsequent years.

Unit Categories in 1988-1993

For 1988-1993, the HCUP Massachusetts State Inpatient files include 43 unit categories. The following are the revenue centers associated with each variable:

Included UB-82 Category	Variable	Revenue Centers
Routine Medical/Surgical	UNIT1	111, 121, 131, 141, 151
Routine Obstetrics	UNIT2	112, 122, 132, 142, 152
Routine Pediatrics	UNIT3	113, 123, 133, 143, 153
Routine Psychiatric	UNIT4	114, 124, 134, 144, 154
Routine Other	UNIT5	119, 129, 139, 149, 159
Routine Newborn	UNIT6	170, 171, 172, 179
Neo-Natal ICU	UNIT7	175
Medical/Surgical ICU	UNIT8	201, 202

Pediatric ICU	UNIT9	203
Psychiatric ICU	UNIT10	204
Burn Unit	UNIT11	207
Other ICU	UNIT12	209
Coronary Care Unit	UNIT13	210
Pharmacy	UNIT14	250-259
IV Therapy	UNIT15	260
Medical/Surg Supplies	UNIT16	270, 272-275, 277-279, 290-292, 299
Laboratory	UNIT17	300-307, 309-312, 314, 319, 971
Diagnostic Radiology	UNIT18	320-321, 324, 329, 400-402, 409, 972
Therapeutic Radiology	UNIT19	330-333, 335, 339, 973
Nuclear Medicine	UNIT20	340-342, 349, 974
CAT Scanner	UNIT21	350-352, 359
Surgical Service (OR)	UNIT22	360-362, 367, 369, 975
Anesthesiology	UNIT23	370, 374, 379, 963-964
Blood	UNIT24	380-382, 389
Blood Storage Proc & Adm	UNIT25	390-391, 399
Respiratory Therapy	UNIT26	410, 412-413, 419, 976
Physical Therapy	UNIT27	420, 429, 977
Occupational Therapy	UNIT28	430, 439, 978
Speech Therapy	UNIT29	440, 449, 979
Emergency Room	UNIT30	450, 459, 981
Pulmonary Function	UNIT31	460, 469
Audiology	UNIT32	470-472, 479
Cardiac Catheterization	UNIT33	480-482, 489
Ambulance	UNIT34	540-545, 549
Recovery Room	UNIT35	710, 719
Labor and Delivery	UNIT36	720-724, 729
EKG	UNIT37	730-731, 739, 985
EEG	UNIT38	740, 749, 922, 986
Renal Dialysis	UNIT39	800-802, 805-814, 880-881
Kidney Acquisition	UNIT40	860-866
Psychology/Psychiatry	UNIT41	900-903, 909-919, 961
Other Ancillary	UNIT42	280, 490, 499, 510-512, 519, 530-531, 539, 560, 700, 709, 750, 759, 890-893, 899, 920-921, 929, 940-943, 949, 960, 962, 969, 984, 987, 988, 989
Unknown Revenue Center	UNIT43	Includes charges for which the UB-82 revenue center was invalid, not used by Massachusetts Rate Setting Commission, or unspecified.

Unit Categories Starting in 1994

Starting in 1994, the HCUP Massachusetts State Inpatient files include 81 unit categories. The following are the UB-92 revenue centers associated with each variable:

Included UB-92 Category	Variable	Revenue Center
Routine Medical/Surgical	UNIT1	111
Routine Obstetrics	UNIT2	112

Routine Pediatrics	UNIT3	113
Routine Psychiatric	UNIT4	114
Routine Hospice	UNIT5	115
Routine Detoxification	UNIT6	116
Routine Oncology	UNIT7	117
Routine Rehabilitation	UNIT8	118
Other Routine Accommodation	UNIT9	119
Routine Nursery	UNIT10	170
Neo-natal ICU	UNIT11	175
Medical/Surgical ICU	UNIT12	200
Pediatric ICU	UNIT13	203
Psychiatric ICU	UNIT14	204
Post Care ICU	UNIT15	206
Burn Unit	UNIT16	207
Trauma ICU	UNIT17	208
Other Special Care ICU	UNIT18	209
Coronary Care Unit	UNIT19	210
Myocardial Infarction Unit	UNIT20	211
Pulmonary Care Unit	UNIT21	212
Heart Transplant Unit	UNIT22	213
Post Coronary Care Unit	UNIT23	214
Other Coronary Care Unit	UNIT24	219
Special Charges	UNIT25	220
Incremental Nursing Charge Rate	UNIT26	230
All Inclusive Ancillary	UNIT27	240
Pharmacy	UNIT28	250
IV Therapy	UNIT29	260
Medical/Surgical Supplies	UNIT30	270
Oncology	UNIT31	280
Durable Medical Equipment	UNIT32	290
Laboratory	UNIT33	300
Laboratory Pathological	UNIT34	310
Diagnostic Radiology	UNIT35	320
Therapeutic Radiology	UNIT36	330
Nuclear Medicine	UNIT37	340
CAT Scan	UNIT38	350
Surgical Service (OR)	UNIT39	360
Anesthesia	UNIT40	370
Blood	UNIT41	380
Blood Storage/Processing	UNIT42	390
Other Imaging Services	UNIT43	400
Respiratory Services	UNIT44	410
Physical Therapy	UNIT45	420
Occupational Therapy	UNIT46	430
Speech-Language Pathology	UNIT47	440
Emergency Room	UNIT48	450
Pulmonary Function	UNIT49	460
Audiology	UNIT50	470
Cardiology	UNIT51	480
Ambulatory Surgical Care	UNIT52	490
Outpatient Services before admission (Invalid for Inpatient Purposes)	UNIT53	500
Clinic (Invalid for Inpatient Purposes)	UNIT54	510

Ambulance	UNIT55	540
Medical Social Services	UNIT56	560
MRI	UNIT57	610
Med/Surg Supplies (extends 270)	UNIT58	620
Drugs Req. Specific Identification	UNIT59	630
Hospice Services	UNIT60	650
Cast Room	UNIT61	700
Recovery Room	UNIT62	710
Labor Room/Delivery	UNIT63	720
EKG/ECG	UNIT64	730
EEG	UNIT65	740
Gastro-Intestinal Services	UNIT66	750
Treatment or Observation Room	UNIT67	760
Lithotripsy	UNIT68	790
Inpatient Renal Dialysis	UNIT69	800
Organ Acquisition	UNIT70	810
Dialysis (National Assignment)	UNIT71	860
Miscellaneous Dialysis	UNIT72	880
Other Donor Bank	UNIT73	890
Psychiatric/Psycholog. Treatments	UNIT74	900
Psychiatric/Psychological Services	UNIT75	910
Other Diagnostic Services	UNIT76	920
Other Therapeutic Services	UNIT77	940
Other Ancillary Services	UNIT78	950
Professional Fees	UNIT79	960
Professional Fees	UNIT80	970
Professional Fees	UNIT81	980

New Jersey

The unit categories from New Jersey are:

UNIT1	Medical-Surgical Days
UNIT2	Obstetric Days
UNIT3	Pediatric Days
UNIT4	Psychiatric Days
UNIT5	Burn Care Unit Days
UNIT6	Intensive Care Unit Days
UNIT7	Coronary Care Unit Days
UNIT8	Neonatal Intensive Care Unit Days
UNIT9	Newborn Nursery Days
UNIT10	Emergency Room Visits
UNIT11	Clinic Visits
UNIT12	Home Health Visits
UNIT13	Anesthesiology Minutes Used
UNIT14	Cardiac Catheterization Procedures
UNIT15	Delivery & / or Gyn Procedures
UNIT16	Dialysis Treatments
UNIT17	Times Drugs or Pharmacy Used
UNIT18	Electrocardiograms
UNIT19	Laboratory Tests
UNIT20	Number of Medical Surgical Supplies
UNIT21	Number of EEGs and EMGs

UNIT22	Nuclear Medicine Procedures
UNIT23	Occupational Therapy Visits
UNIT24	Operating Room Procedures
UNIT25	Organ Transplants
UNIT26	Physical Therapy Visits
UNIT27	Psychiatric Hours (Spent with Patient)
UNIT28	Times Radiology Used
UNIT29	Respiratory Therapy Treatments
UNIT30	Speech Pathology Visits
UNIT31	Therapeutic Radiology Procedures
UNIT32	Same Day Surgery Visits
UNIT33	Excluded Revenue Codes
UNIT34	Non-Acute Ancillary Revenue Codes
UNIT35	Medicare, Part B, Non-Acute Codes

New York

UNIT1-UNIT5 contain accommodation units of service.

Revenue Codes for Detailed Charges

See note under revenue codes (REVCDn) for a definition of all of the revenue codes associated with these detailed charges (UNITn). Detailed charges (CHGn) are associated with the identified revenue centers (REVCDn), units of service (UNITn) and rates (RATEn). For example, CHG1 applies to the revenue center in REVCD1 for the rate in RATE1 and the units of service specified in UNIT1. Revenue codes are available for accommodation and ancillary charges. Units and rates are available for accommodation charges.

Adjustment to Charges for Interim Bills

For 1988-1992, when the length of stay from the Discharge Data Abstract did not equal the length of the billing period from the Uniform Billing Form, total charges (TOTCHG) and charge details (CHGn, RATEn, UNITn, REVCDn) were set to missing (.) because this billing information pertained only to the billing period, not the complete inpatient stay. However, TOTCHG_X contains the original value from the billing record.

Beginning in 1993, billing dates were not reported by New York and the adjustment to charge details (CHGn, RATEn, UNITn, REVCDn) was not made.

South Carolina

Negative values were set to invalid (.A) during HCUP processing.

Prior to 1995
South Carolina supplied 11 unit categories:

UNIT1	Room & Board - general medical units
UNIT2	Room & Board - psychology units
UNIT3	Room & Board - detoxification units

UNIT4	Room & Board - oncology units
UNIT5	Room & Board - rehabilitation units
UNIT6	Room & Board - other units
UNIT7	Nursery units
UNIT8	Premature nursery units
UNIT9	Neonatal ICU units
UNIT10	ICU units
UNIT11	CCU units

Starting in 1996
South Carolina supplied 19 unit categories:

UNIT1	All Inclusive Rate units
UNIT2	Room & Board - General medical units
UNIT3	Room & Board - Psych units
UNIT4	Room & Board - Hospice units
UNIT5	Room & Board - Detox units
UNIT6	Room & Board - Oncology units
UNIT7	Room & Board - Rehab units
UNIT8	Room & Board - Other units
UNIT9	Nursery - Levels I & Other units
UNIT10	Nursery - Level II units
UNIT11	Nursery - Level III units
UNIT12	Nursery - Level IV units
UNIT13	ICU units
UNIT14	ICU - Pediatric units
UNIT15	ICU - Psych units
UNIT16	ICU - Intermediate ICU units
UNIT17	ICU - Burn Unit units
UNIT18	Coronary Care units
UNIT19	Coronary Care - Intermediate CCU units

Washington

Units of service (UNITn) refer to the revenue centers (REVCDn) and are reflected in the detailed charges (CHGn). For example, CHG1 applies to the revenue center in REVCD1 and the units of service specified in UNIT1.

Units are not required for all revenue sources; the units field may be coded as missing (.) or zero.

See notes under revenue codes (REVCDn) for the associated units.

YEAR Calendar year

Variable	Description	Value	Value Description
YEAR	Calendar year	nn	Calendar Year

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

Discharge year is always coded and has the format yy. For example, if the discharge year is 1990, then YEAR = 90.

ZIP **Patient zip code**

Variable	Description	Value	Value Description
ZIP	Patient zip code	nnnnn	Zip codes
		C	Canada
		M	Mexico
		F	Other or unspecified foreign
		blank	Missing
		A	Invalid
		B	Unavailable from Source

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

Zip code verification is performed differently across years of HCUP data. In earlier years of HCUP data (1988-1991, and for some states 1992), the supplied zip code is verified against a composite list of zip codes valid as of December 1987, 1990, and 1992. For later years of HCUP data, the supplied zip code is only required to be numeric. Zip codes that fail these checks are set to invalid (.A).

Foreign zip codes are recoded to indicate:

- Canada,
- Mexico, or
- Other or unspecified foreign zip codes.

Arizona

Arizona codes a five-digit abbreviation for the country of foreign residents. Canadian residents are coded to “Canada” (ZIP=”C”), Mexican residents are coded to “Mexico” (ZIP=”M”), and all others are coded to “Foreign” (ZIP=”F”).

The source category for transients and homeless ("TRANS") is recoded to the HCUP category Missing (ZIP = Blank).

Colorado

Colorado uses only one category for all foreign zip codes, including Canada and Mexico. These are assigned to the HCUP category for Other/Unspecified Foreign (ZIP = "F").

In 1993, Colorado began to assign the zip code "00003" to homeless patients. During HCUP processing, these zip codes are set to missing (" ").

Florida

Florida masked zip codes of areas in Florida where the population is less than 500 people. These masked codes were set to missing (.) during HCUP processing.

Florida reports a single "Foreign Country" category which includes Canada and Mexico. During HCUP processing, "Foreign Country" was assigned to the uniform category for "Other/Unspecified Foreign" (ZIP = F).

Beginning in 1997, Florida reports a separate zip code category for homeless patients. During HCUP processing, this zip code is recoded as missing (ZIP = blank).

Iowa

Iowa does not code foreign zip codes. Any non-U.S. zip codes would appear as missing (' ') or invalid ('A').

New Jersey

New Jersey does not report foreign, Canadian or Mexican zip postal codes. In the source data, these ZIP codes are blank. During HCUP processing, blank values were assigned to missing (" ").

New York

For 1988-1992, New York uses only one category for all foreign zip codes, including Canada and Mexico. These are assigned to the HCUP category for Other/Unspecified Foreign (ZIP = "F").

Beginning in 1993, New York does not separately classify Mexican zip codes. These codes are assigned to the HCUP category for Other/Unspecified Foreign (ZIP = "F").

Oregon

Oregon does not report foreign, Canadian, or Mexican postal codes, but instead reports them as "missing" or "invalid" ZIP code values. During HCUP processing, these were assigned as missing (ZIP = blank) or invalid (ZIP = .A).

Wisconsin

Wisconsin uses only one category for all foreign zip codes, including Canada and Mexico. These are assigned to the HCUP category for Other/Unspecified Foreign (ZIP = "F").

Wisconsin suppressed zip codes with low frequency (less than 30 discharges per quarter) or low population (less than 1000 people). These zip codes will appear as missing (" ") in the HCUP Wisconsin data.

ZIP_S Patient zip code (synthetic)

Variable	Description	Value	Value Description
ZIP_S	Patient zip code (synthetic)	nnnnn C M F blank A B	Zip codes Canada Mexico Other or unspecified foreign Missing Invalid Unavailable from Source

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

ZIP_S contains an encrypted version of the patient's residential zip code (ZIP). To prevent inadvertent or intentional identification of specific patients based on the patient's residential zip code, the last 2 digits were encrypted. While it is still possible to identify the state of a patient's residence using the first three unencrypted zip code digits, ZIP_S does not allow placement of a specific patient within a narrower, zip code-based geography.

Users of the encrypted zip code variable are strictly forbidden to identify the actual zip code associated with the encrypted zip code.